

U.S. DEPARTMENT OF TRANSPORTATION  
Federal Highway Administration  
Utah Division Office

RECORD OF DECISION

Legacy Parkway Project  
Salt Lake and Davis Counties, Utah

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## RECORD OF DECISION

This document is the Federal Highway Administration's (FHWA) Record of Decision (ROD) regarding the proposed Legacy Parkway project. This ROD approves the selection of the Preferred Alternative for Legacy Parkway, as identified in the *Legacy Parkway Final Supplemental Environmental Impact Statement/Reevaluation and Section 4(f), 6(f) Evaluation* (Final Supplemental EIS) dated November 2005. This approval constitutes FHWA's acceptance of the Preferred Alternative alignment of Legacy Parkway and completes the environmental approval process for additional access to Interstate 215 (I-215) and Interstate 15 (I-15), as described in the Request for Additional and Modifications of Access Points on I-215 and I-15.

A complete description of the Preferred Alternative (Alternative E), henceforth referred to as the Selected Alternative, and the Legacy Parkway alignment is provided in detail in the Final Supplemental EIS and summarized below. The Final Supplemental EIS and the entire project record are available for review by written request to the Utah Division of FHWA.

This ROD is based on the information presented in the Final Supplemental EIS, and its associated administrative record, prepared for FHWA, the U.S. Army Corps of Engineers (Corps), and the Utah Department of Transportation (UDOT); information presented in the *Legacy Parkway Final Environmental Impact Statement and Section 4(f), 6(f) Evaluation* (Final EIS) (Federal Highway Administration et al. 2000); and input received from the public and interested agencies on the nature and extent of the proposed action, proposed action alternatives, potential impacts resulting from implementation of the proposed action, and the methodology used to evaluate and assess the impacts. The following specific opportunities for public input and review were provided: an open house public meeting and four focus group meetings held during the formal scoping period; five community planning information committee (CPIC) meetings focused on collecting and sharing information critical to completing specific technical analyses; several small group meetings requested by specific individuals, organizations, and other interested parties; a 24-hour telephone hotline; and public comment periods on the Draft Supplemental EIS and the Final Supplemental EIS. Comments on the Draft Supplemental EIS were received from federal, state, and local agencies, and nongovernmental organizations. These comments and comments from the public were considered in preparing the Final Supplemental EIS, as disclosed in Volume 2 of the Final Supplemental EIS.

The approval documented in this ROD incorporates by reference the information in the Final EIS administrative record, including the approval set forth in the ROD prepared in October 2000 for the Final EIS. This decision document outlines all new and relevant information used by FHWA for approval of the Selected Alternative, and references relevant portions of the October 2000 decision document, as appropriate.

As outlined in October 2000 ROD for the Final EIS, the Selected Alternative is part of a "Shared Solution" designed to address existing and future transportation demands related to population growth in the North Corridor (northern Salt Lake County and Davis County). The Shared Solution, which was developed collaboratively by UDOT, the Utah Transit Authority (UTA), and communities in the area, consists of three main components: expansion of the mass transit system, improvement and expansion of I-15, and construction of Legacy Parkway. Additional components of the Shared Solution include improvements to local arterials and implementation of intelligent transportation systems (ITS), transportation systems management (TSM), and transportation demand management (TDM) measures. The results of the reevaluation process, which are documented in the Final Supplemental EIS, confirmed

the conclusion in the Final EIS that all the transportation system elements included in the Shared Solution are needed to meet current and future transportation needs in the North Corridor.

The Selected Alternative is a four-lane, limited-access, divided highway and trail extending 22.5 kilometers (km) (14 miles [mi]) from I-215 in Salt Lake City, Utah, north to I-15 and U.S. Highway 89 (US-89) in Farmington, Utah. Overpasses will be constructed at Center Street in North Salt Lake; 1250 West in Centerville; and Glovers Lane, State Street, and Park Lane in Farmington. In addition to the southern and northern terminus interchanges, interchanges will be constructed at 500 South in Woods Cross and Parrish Lane in Centerville. At the southern terminus, I-215 will be widened between 2100 North and a new (Legacy Parkway) interchange about 0.5 km (0.3 mi) west of the I-215 / Redwood Road interchange in North Salt Lake. At the northern terminus, the I-15/US-89 interchange will be reconstructed to provide connections between US-89, I-15, and the new Legacy Parkway. Three frontage roads will also be provided on the alignment to maintain existing access, and a multi-use trail for pedestrians, bicyclists, and equestrians will parallel the highway along its entire length. The trail will connect to the Jordan River Trail at the southern end, the Davis County Trail system at the northern end, and community trails along intermediate points.

The Selected Alternative also includes reconstruction of Burke Lane, which was completed in 2005. Burke Lane was reconstructed and renamed Park Lane. The reconstructed Park Lane extends across I-15 and the Union Pacific Railroad (UPRR) to connect with State Street (Clark Lane) at 1100 West in Farmington.

## A. SUMMARY OF COURT RULING ANALYSIS

The Final Supplemental EIS contains detailed information designed to address issues identified in the court decision of the U.S. Court of Appeals for the Tenth Circuit (*Utahns for Better Transportation et al. v. U.S. Department of Transportation et al.* [305 F. 3d 1152 10<sup>th</sup> Cir. 2002]), hereinafter referred to as the court ruling. The appellate court determined that the following five specific issues were in need of further review.

- Practicability of a narrower right-of-way.
- Elimination of the Denver & Rio Grande (D&RG) regional corridor as a feasible alternative based on cost and substantial impacts on existing development.
- Integration of Legacy Parkway with expansion of mass transit.
- Alternative sequencing of components of the Shared Solution.
- Impacts on wildlife.

### Narrower Right-of-Way

The appellate court required additional study beyond that considered in the Final EIS of the practicability of a narrower right-of-way. After conducting a technical analysis of right-of-way issues, documented in the Legacy Parkway technical memorandum *Right-of-Way Issues* (HDR Engineering 2005) and summarized in the Final Supplemental EIS, it was concluded that the median width of the proposed facility could be reduced by 5 meters (m) (16 feet [ft]), resulting in a reduction in the total right-of-way width from 100 m (328 ft) to 95 m (312 ft). It was determined that this narrower median width would not substantially compromise the safety of the facility or the water quality function of the vegetated median. The narrower 95-m (312-ft) right-of-way width will be used for most portions of the mainline right-of-

way. However, in areas where wetlands, residences, or Section 4(f) properties could be avoided by further reducing the width of the roadway footprint within the right-of-way, the footprint could be reduced to 80 m (264 ft) by reducing the buffer area to 11 m (36 ft). All the build alternatives evaluated in detail in the Final Supplemental EIS were modified to reflect the narrower right-of-way width of 95 m (312 ft) and the flexible footprint within the right-of-way.

In addition, in September 2005, at the request of FHWA and the Corps, the federal lead agencies, UDOT prepared a memorandum (Shingleton pers. comm.) describing the standards or references that were used to determine the widths of the components of the frontage roads associated with the Final Supplemental EIS build alternatives. Just as the components of the Legacy Parkway mainline were reviewed to evaluate whether a narrower cross section could be developed to reduce impacts on wetlands and other sensitive resources, the design of the frontage roads was reviewed to look for opportunities to reduce widths. It was determined that 20 m (66 ft) is the minimum width for the frontage roads that would meet state design standards. This width would be in addition to the 95-m (312-ft) right-of-way width attributed to the build alternative alignments. All evaluations conducted for the Final EIS and the Final Supplemental EIS considered and disclosed the environmental impacts that would be associated with construction of the frontage roads.

In considering reduction of total right-of-way width, an important distinction should be noted between the right-of-way width and the actual roadway footprint. The Selected Alternative reflects not only a narrower right-of-way, but also context-sensitive design features within the right-of-way that allow for flexibility in the width of the roadway footprint. Reducing the right-of-way width to less than 312 feet would constrain the footprint alignment more and eliminate the flexibility to avoid wetlands and other sensitive resources.

### **Denver & Rio Grande Railroad Regional Corridor Alternatives**

The appellate court also required additional study beyond that considered in the Final EIS of elimination of the D&RG regional corridor as a feasible alternative on the basis of high costs and substantial impacts on existing development. Cost data for all regional corridors were updated, and five specific alignment options within the D&RG regional corridor were evaluated to determine whether a reasonable alternative within the D&RG regional corridor could be developed. As part of this evaluation, planning-level cost estimates for the D&RG regional corridor and all the other regional corridors considered were updated. In addition, FHWA and the Corps required preparation of more detailed cost estimates for the specific alignments within the D&RG regional corridor. The cost estimates were reviewed by the Corps as well as the FHWA Utah Division and Headquarters staff. The results of the more detailed reevaluation of this regional corridor, which are documented in the Legacy Parkway technical memorandum *Denver & Rio Grande Corridor Evaluation* (HDR Engineering 2004a) and summarized in the Final Supplemental EIS, reaffirm the conclusion of the Final EIS that this alternative is not reasonable or practicable for the following reasons.

- The D&RG alignments would require substantial relocations for a facility of similar type and location. As summarized in Chapter 2 of the Final Supplemental EIS, the D&RG alignments would require between 149 and 279 business and residential relocations, compared to 18 business and residential relocations required under the Selected Alternative. The lead agencies determined that the substantial relocations and resultant community impacts required by the D&RG alignments are unreasonable compared to the Selected Alternative, and logistically impracticable.
- The D&RG alignments would have considerably more impact on community cohesion than the Selected Alternative. The evaluation of impact on community cohesion was based on input received from local jurisdictions; an assessment of the physical barriers (i.e., number of bridges, cul-de-sacs, cut-off-roads, noise walls, and retaining walls) that would be created by a D&RG alignment

alternative; the percentage of the population in a community that would be segmented by a transportation facility; and the number of public school service areas and church congregations that would be divided by a D&RG alignment alternative. These impacts are summarized in Chapter 2, Section 2.2 of the Final Supplemental EIS and in the Legacy Parkway technical memorandum *Denver & Rio Grande Corridor Evaluation* (HDR Engineering 2004a).

- The D&RG alignments would eliminate a large portion of the local tax base for the City of North Salt Lake by displacing or altering access routes to businesses.
- The D&RG alignments would cost between \$134 and \$256 million more than the Selected Alternative, depending on the location of the alignment. FHWA as well as the Corps considered cost in its practicability determination for the D&RG alternative.

### **Integration of Legacy Parkway with Expansion of Mass Transit**

The appellate court also required additional study beyond that considered in the Final EIS of the integration of Legacy Parkway and mass transit as a possible reasonable alternative. In response to the court's holding, the lead agencies evaluated ways to integrate Legacy Parkway with expansion of mass transit; this evaluation is documented in the Legacy parkway technical memorandum *Integration of Highways and Transit in the North Corridor* (Fehr & Peers 2004) and summarized in the Final Supplemental EIS. A fully integrated "robust transit scenario" (referred to as *maximum future transit*) was developed as part of this analysis and used as the basis of the transit assumptions in evaluating all the build alternatives in the Final Supplemental EIS; the No-Build Alternative incorporated only those mass transit improvements included in the *Wasatch Front Urban Area Long Range Transportation Plan Update, 2004–2030* (WFRC long range plan) (Wasatch Front Regional Council 2003). For evaluating the need for any of the other alternatives recommended, maximum future transit was included as part of the future baseline assumptions. Maximum future transit includes physical and program-level transit improvements, such as bus rapid transit, commuter rail, and coordinated arrival times at stations for various services and modes; substantial increases in downtown parking fares; a 50 percent reduction in transit fares; and changes in local development patterns to more transit-supportive land use patterns.

The results of the travel demand model analysis conducted as part of the reevaluation show that, even assuming that all of these transit-supportive projects, programs, and land use changes were in place in the future, an alternate highway route through the North Corridor would still be needed to meet the transportation demand in 2020 and beyond. Local, state, and federal transportation officials embrace many of the concepts and improvements included in maximum future transit (as developed for the integration analysis), many of which are also included in current and future plans. However, the integration analysis concluded and officials recognize that maximum future transit alone would not meet the project purpose and need.

The integration analysis also studied the opportunities to physically integrate the construction of the Legacy Parkway project with construction of mass transit improvements. As a result, several integration opportunities have been implemented as part of the construction work completed to date or are planned for implementation in the future. Since publication of the Final EIS, the UTA commuter rail project has advanced to the point that more specific information is available about the commuter rail plans, including proposed station locations, and it is now feasible to coordinate planning efforts between the two projects.

### **Sequencing of the Shared Solution**

The appellate court also required additional study beyond that considered in the Final EIS of the sequencing, or order, of construction of the various components of the Shared Solution (expansion of mass transit, I-15 reconstruction, and Legacy Parkway). The sequencing issues relate to the reasonableness of either constructing Legacy Parkway after the Maximum Future Transit Alternative or

constructing Legacy Parkway after both the Maximum Future Transit Alternative and I-15 reconstruction. The questions of reasonableness addressed (1) whether substantial expansion of mass transit could alleviate the immediacy of the need for Legacy Parkway, and (2) whether substantial expansion of mass transit could provide sufficient relief of traffic congestion during the reconstruction of I-15, such that Legacy Parkway could be delayed further. To examine the impacts of constructing each of the three components of the Shared Solution before, or concurrently with, other components of the Shared Solution, four construction sequencing scenarios were developed and analyzed. The results of the sequencing analysis are documented in the Legacy Parkway technical memorandum *Sequencing of the North Corridor Shared Solution* (HDR Engineering 2004b) and summarized in the Final Supplemental EIS.

The sequencing analysis resulted in the following conclusions.

- Constructing maximum future transit in the North Corridor or reconstructing I-15 prior to building Legacy Parkway would delay the direct impacts on wetlands that would result from construction of Legacy Parkway for 3 or 7 years, respectively.
- Maximum future transit does not alleviate the immediacy of need for Legacy Parkway or I-15 reconstruction. Even with maximum future transit fully implemented by 2008 (and assuming transit-oriented development land use changes are in place in 2008), delaying construction of Legacy Parkway would cause substantial costs to the traveling public from 2005 to 2015. Delaying Legacy Parkway further so that maximum future transit provides the only corridor-length alternative to I-15 during its reconstruction would cause substantial costs to the traveling public during the I-15 reconstruction period, (i.e., 2008–2012).
- Because of high costs to the traveling public, it is not reasonable to delay construction of Legacy Parkway or reconstruction of I-15 until maximum future transit is in place. Delaying Legacy Parkway construction or I-15 reconstruction would result in unreasonable additional costs to the traveling public of between \$48 million and \$498 million from the combined loss of time, mobility, and additional energy costs in the morning and evening peak periods.
- Consistent with the findings of the June 2000 Final EIS, the Final Supplemental EIS found that it is not reasonable to reconstruct I-15 prior to building Legacy Parkway. The results indicate that I-15 would experience extreme congestion without Legacy Parkway to absorb the displaced traffic during I-15 reconstruction. The scenarios that sequenced Legacy Parkway construction prior to I-15 reconstruction provide faster travel times on balance over the 10-year construction period, resulting in \$498 million in lower costs to the traveling public.

The conclusions regarding sequencing were based on comparison of the impacts of the full range of sequencing combinations of the Shared Solution major components. Impacts were evaluated using a range of variables, including timing of direct impacts on wetlands, costs to the traveling public, travel speeds and travel times for users of each of the Shared Solution components, air quality, construction costs, and operating and maintenance costs.

### **Wildlife Impacts**

The appellate court also found that the lead agencies failed to adequately consider impacts on wildlife in the June 2000 Final EIS by limiting the impact evaluation to habitat within 305 m (1,000 ft) of the project right-of-way and failing to consider impacts on migratory bird populations that use the larger Great Salt Lake Ecosystem (GSLE). In response to the court's holding, the lead agencies conducted a reanalysis of the project's impacts on wildlife. The reanalysis expanded the analysis of impacts on wildlife by considering direct, indirect, and cumulative impacts on wildlife, particularly migratory birds, within and beyond 305 m (1,000 ft) of the project study area in the Great Salt Lake Ecosystem (GSLE). Project

impacts on wildlife were analyzed using a three-level study area: the project study area (for direct and indirect effects), a larger regional study area (for indirect and cumulative effects), and the entire GSLE (for context and cumulative effects analysis). The following impacts were evaluated: direct habitat loss, changes in habitat loss when combined with the natural effects of lake level change, habitat fragmentation, changes in habitat quality, habitat modification, wildlife highway mortality, human disturbance, effects on special-status wildlife, and cumulative effects.

The conclusions of the wildlife impact analysis are documented in the *Legacy Parkway Wildlife Impacts Analysis Technical Memorandum* (Jones & Stokes 2005) and summarized in Section 4.13, *Wildlife*, of the Final Supplemental EIS. In summary, the analysis concluded that the Selected Alternative will result in adverse direct and indirect effects on wildlife and their habitat and will contribute to cumulative effects on local wildlife populations, including migratory birds. These adverse effects will contribute to declines in the local density of affected species. In addition, traffic noise could potentially affect the behavior and reproductive capacity of various migratory bird species within the project study area and vicinity. It was further concluded, however, based on the following, that these impacts alone will not likely affect the long-term viability of any wildlife species in the GSLE.

- The area of wildlife habitat affected by direct habitat loss represents a small percentage of the total amount of wildlife habitat available throughout the regional study area. Wildlife habitats are available in the Jordan River Delta and the Farmington Bay Wildlife Management Area, as well as in the larger GSLE, and wildlife habitat in the project study area represents a very small percentage of habitat available in the region.
- The project study area does not support any ecologically unique habitats that will not still be available west of the Selected Alternative. As such, habitat fragmentation will not reduce the diversity of habitat types in the project study area.
- Creation and maintenance of the Legacy Nature Preserve (see Section H, *Measures to Minimize Harm*, below) will result in preservation of 2,098 acres of important wildlife habitat in perpetuity in an area that would otherwise likely be lost to development. This acreage reflects the addition of 317 acres for impacts on wildlife that were added during the preparation of the June 2000 Final EIS (through coordination with USFWS) and 530 acres that were added at the request of EPA after publication of the June 2000 Final EIS. Establishment of the Preserve will mitigate some of the population declines that would likely occur without it and will create a distance and noise buffer of undeveloped habitat for some areas west of the Selected Alternative.
- UDOT will fund a study to determine the effects of highway noise on bird populations in the project study area and comparable habitats. This mitigation is extremely valuable because there are currently no accepted methods for assessing impacts on and mitigation requirements for wildlife impacts resulting from highway noise.
- Impacts on wildlife are further summarized below in Section D, *Description of Alternatives Evaluated in Detail in the Final Supplemental EIS*.

## B. SUMMARY OF REEVALUATION

Under the FHWA NEPA regulations (23 CFR §771.129), FHWA prepares a written evaluation of a final EIS whenever major events to advance a proposed action have not occurred within 3 years of approval of the final EIS. In the case of the Legacy Parkway project, a reevaluation was conducted because continued construction of the project was halted as a result of the court ruling, and more than 3 years had passed



since FHWA filed the Legacy Parkway Final EIS in June 2000. The primary purpose of the reevaluation process is to determine whether any changes in the project; changes in the existing physical or regulatory environment, including project design, concept, and scope; or changes in the affected environment, impact analysis, and proposed mitigation measures would result in the need to update technical information in the final EIS.

Typically, FHWA uses a reevaluation process to determine whether an existing EIS is valid or a supplemental EIS is required. In this case, however, the court ruling required the preparation of additional studies, which led to FHWA and the Corps' decision to prepare a Supplemental EIS for the proposed action. The reevaluation process, therefore, was not used to decide whether a supplemental EIS should be prepared; rather, it was used to assess whether issues in addition to those addressed by the court ruling warranted attention in the Supplemental EIS given the time that had passed since the Final EIS. However, all sections of the Final EIS were reviewed for possible changes or new information, and updates and changes were provided as appropriate.

The Final Supplemental EIS reflects the results and conclusions derived from both the analyses required by the court ruling and those associated with the reevaluation. The significant conclusions and impact analysis methods adopted as a direct result of the reevaluation process are listed below.

- Use of an updated travel demand model developed and maintained by WFRC. Specifically, the June 2000 Final EIS used a January 2000 version of the WFRC travel demand model, whereas the Final Supplemental EIS and associated technical memoranda are based on version 3.2 of the WFRC travel demand model, which was developed in fall 2003 and updated in early 2004. Information derived from the updated model affected many of the technical analyses presented in the Final Supplemental EIS, as well as the measures of effectiveness tied to the purpose and need for the proposed action and the analysis specific to the selection and screening of project alternatives.
- Application of revised UDOT design standards for new freeways. In particular, in February 2005, after publication of the Final EIS, UDOT updated its standard drawing DD 4 (Geometric Design for Freeway) to require a minimum 15-m (50-ft) width for open medians to reflect recent research in roadway geometrics. The median width for all the build alternatives evaluated in detail in the Final Supplemental EIS was reduced from 20 m (66 ft) to 15 m (50 ft).
- Use of revised 2000 Census data and revised regional socioeconomic and demographic data (2003) to complete an updated demographic and economic analysis of the study area, including an assessment of minority and low-income populations and employment projections for the Wasatch Front region.
- Application of the updated regional air quality conformity analysis for the Wasatch Front Region, which was prepared in 2003 by WFRC. A later conformity analysis was approved by FHWA and the Federal Transit Administration (FTA) in September 2005. WFRC, the U.S. Environmental Protection Agency (EPA), FTA, UDOT, and FHWA also followed interagency consultation procedures to determine that a new regional emission analysis and conformity finding was not required as a result the State of Utah Settlement Agreement described in Section E, *State of Utah Settlement Agreement*, of this ROD.
- Application of an updated (version 2.1) traffic noise model to assess project related noise impacts.

## C. ALTERNATIVES CONSIDERED

### Description of Alternatives Screening Process

This Record of Decision is based on consideration of all the alternatives described in Chapter 3 of the Final Supplemental EIS, and the associated administrative record. The following categories of alternatives were considered. The complete scope of alternatives considered in the Final Supplemental EIS is described below in Section D, *Description of Alternatives Evaluated in Detail in the Final Supplemental EIS*.

- **Alternatives considered in the June 2000 Final EIS.** These comprise alternatives that had been screened out from detailed study and consideration in the Final EIS, the Final EIS No-Build Alternative, and the four proposed build alternatives described in the Final EIS (i.e., Alternatives A, B, C, and D [Final EIS Preferred Alternative]).
- **Additional alternatives evaluated in the Supplemental EIS process.** These comprise alternatives that were eliminated from detailed study, as well as four modified build alternatives evaluated in detail in the Supplemental EIS (i.e., Alternatives A, B, C, and E).
- **Alternative ways of implementing Legacy Parkway.** These comprise using a narrower right-of-way width, integrating the construction of the highway with mass transit improvements, alternative construction sequences for Legacy Parkway with the other Shared Solution components, and alternatives without the trail component.

The Final Supplemental EIS explains the criteria used to determine which of the alternatives were carried forward for detailed analysis. Initially, project alternatives were evaluated on the basis of their ability to meet the project purpose and need. As described in Chapter 1, *Purpose and Need*, of the Final Supplemental EIS, the primary purpose of the Legacy Parkway project is to provide capacity to help relieve existing and projected travel demand in the North Corridor through 2020. The secondary purpose is to provide an alternate north-south route through the North Corridor. None of the alternatives evaluated were screened out solely on the basis of their inability to meet the secondary purpose of providing an alternate route.

For alternatives that met the purpose and need criteria, other factors were also considered when evaluating whether an alternative was practicable and reasonable to carry forward for detailed analysis in the Final Supplemental EIS. These evaluation criteria included environmental factors such as impacts related to wetlands, farmland, hazardous waste sites, and Section 4(f)/6(f) resources; socioeconomic factors such as utility, business, and residential relocations, as well as community impacts; and cost. This approach was consistent with the evaluation criteria applied as part of the evaluation of alternatives presented in the June 2000 Final EIS.

### Summary of Alternatives Screening Process

The following provides a summary of the alternatives screening process conducted for the Final Supplemental EIS.

#### *Description of Screening Process*

As described in the Final EIS Record of Decision, all reasonable non-highway alternatives (arterial system improvements, ITS, TSM, TDM, and maximum reasonable future transit) were initially analyzed on the basis of operational features, constructability, safety, capacity, cost and demographic characteristics. The analysis in the Final EIS determined that none of the non-highway alternatives provided enough capacity alone to meet the anticipated transportation demand in 2020. The updated

travel demand analysis conducted for the Final Supplemental EIS confirmed that implementation of a stand-alone, non-highway alternative would not meet the purpose and need of the proposed action.

The Final EIS alternatives analysis also considered widening I-15 in the North Corridor from its current eight-lane configuration to meet the remaining demand not met by the non-highway alternatives. A ten-lane I-15 alternative, the widest reasonable configuration, was combined with the non-highway alternative to determine how these options together would accommodate anticipated capacity needs in the North Corridor. The Final EIS evaluation concluded that this combination would meet only 74 percent of the total anticipated demand in 2020 and that, therefore, there was a need for an additional high-capacity highway, such as Legacy Parkway, in the North Corridor. This need for a multi-component "Shared Solution" was also confirmed in the alternatives analysis process conducted for the Final Supplemental EIS.

The initial screening process for a new highway alignment presented in the Final EIS considered five regional corridor alignments for Legacy Parkway: Antelope Island, Trans-Bay, Farmington Bay, Railroad (D&RG and UPRR), and Great Salt Lake. The alternatives screening process presented in the Final EIS determined that, of these five regional corridor alignments, a highway alternative within the Great Salt Lake regional corridor would result in less impact on wetland and/or land use than the other regional corridor alignments, and would cost less. Accordingly, five alternatives within the Great Salt Lake regional corridor were carried forward for detailed study in the Final EIS: a No-Build Alternative and four build alternatives (Alternatives A, B, and C, and D [Final EIS Preferred Alternative]). All the build alternatives analyzed in the Final EIS included a trail system for pedestrian, bicyclist, and equestrian use.

In response to the court ruling and as a result of the reevaluation process, cost estimates for all of the regional corridor alignments were revised and updated, and environmental impacts associated with alignments in the D&RG regional corridor were reevaluated. The revised regional corridor cost estimates, which are presented in Chapter 3 of the Final Supplemental EIS, show that the costs associated with a highway in all the regional corridors have increased since June 2000, when the cost estimates were prepared for the Final EIS. Nonetheless, of the five regional corridor alignments, the estimated cost of the Great Salt Lake corridor alignment remains the lowest, at approximately \$439 million, followed by the D&RG regional corridor alignment, at \$589 million. Each of the revised regional cost estimates were independently verified by the Corps and FHWA.

Certain environmental impacts specific to the D&RG regional corridor were also reassessed to determine whether potential impacts in that corridor would be substantially less than those associated with alignments in the Great Salt Lake corridor. The results of this more detailed reevaluation, which are summarized above in Section A, *Summary of the Court Ruling*, reaffirmed the conclusion from the Final EIS that a highway alignment alternative in the D&RG regional corridor is not reasonable or practicable because of displacement, community cohesion, and wetland impacts. As noted above, an alignment in the D&RG regional corridor was also estimated to cost approximately \$150 million more than an alignment in the Great Salt Lake regional corridor.

Based on the results and conclusions derived from the analyses required by the court ruling and those associated with the reevaluation process, a modified No-Build Alternative and four modified build alternatives within the Great Salt Lake regional corridor—Alternatives A, B, C, and E—were carried forward for detailed analysis in the Final Supplemental EIS. Two primary modifications were made to the build alternatives evaluated in the June 2000 Final EIS: (1) the right-of-way width was reduced to 95 m (312 ft), and (2) the project features were designed and implemented to allow better integration with mass transit. A detailed description of the No-Build and build alternatives evaluated in the Final Supplemental EIS is provided below in Section D, *Description of Alternatives Evaluated in Detail in the Final Supplemental EIS*.

### *Additional Alternatives Evaluated but Eliminated from Further Consideration*

The Final Supplemental EIS also evaluated additional alternatives and reconsidered alternatives addressed in the Final EIS. As described above, the criteria used in the Final Supplemental EIS to evaluate alternatives that were considered but subsequently eliminated from detailed study included the ability of the alternative to meet project purpose and need as well as the consideration of environmental factors, including impacts on wetlands; impacts on farmland; hazardous waste sites; use of Section 4(f)/6(f) resources; and socioeconomic factors including utility, business, and residential displacements, other community impacts, and cost.

The following alternatives were evaluated but subsequently eliminated from detailed study in the Final Supplemental EIS. These alternatives are described in detail in Chapter 3, *Alternatives*, of the Final Supplemental EIS.

- D&RG Railroad Corridor Alternative
- Parkway Facility Adjacent to Redwood Road Alternative
- Redwood Road Arterial Alternative / Boulevard Sub-Alternative
- Proposed UBET Alternative
- Maximum Future Transit Alternative (No Legacy Parkway)
- Ten-Lane I-15 with Reversible Lanes Alternative (No Legacy Parkway)
- I-15 Improvements beyond Ten Lanes Alternative (No Legacy Parkway)
- Legacy Parkway beyond Four Lanes Alternative

## D. DESCRIPTION OF ALTERNATIVES EVALUATED IN DETAIL IN THE FINAL SUPPLEMENTAL EIS

This section provides a description of the alternatives evaluated in detail in the Final Supplemental EIS, as well as a summary of the major environmental impacts that would be associated with each alternative.

All the build alternatives described in this section would be located within a 95-m (312-ft) right-of-way that would include four 7.2-m (24-ft) travel lanes (two northbound, two southbound); two 9-m (30-ft) clear zones; a 15-m (50-ft) median; a 5- to 6-m (17- to 20-ft) multi-use trail; and a 25- to 27-m (81- to 84-ft) berm/buffer area. This right-of-way width represents a reduction from the 100-m (328-ft) right-of-way width evaluated in the Final EIS. The discussion in Section A above under *Narrower Right-of-Way Analysis* describes the approach taken to evaluate the necessity for and dimensions of each of the highway components that would be located with the Legacy Parkway right-of-way.

In addition, all the build alternatives evaluated in the Final Supplemental EIS reflect opportunities to integrate the construction of physical elements of Legacy Parkway with planned mass transit improvements. This integration, which includes placing interchanges at locations with access to future planned commuter rail stations and lengthening structures to accommodate the physical integration of commuter rail with Legacy Parkway and I-15, will provide an efficient interface and service coordination of highway and transit travel.

## **No-Build Alternative**

Consistent with the June 2000 Final EIS, the No-Build Alternative considered in the Final Supplemental EIS consists of the WFRS long range plan without Legacy Parkway, without the Legacy North project, and without full reconstruction of I-15. The long range plan components included in the No-Build Alternative are commuter rail, widening Redwood Road from two to five lanes from south of I-215 to 500 South, enhanced bus service, and various local road improvements. The No-Build Alternative in the Final Supplemental EIS is different from the No-Build Alternative in the June 2000 Final EIS in that the WFRS long range plan has since been updated to include commuter rail and other capacity-enhancing projects that have been added to the WFRS long range plan. In contrast to the build alternatives, the No-Build Alternative does not include the maximum future transit scenario because some of the more aggressive elements of the robust transit concept are not included in the current WFRS long-range plan.

## **Build Alternatives**

*Alternative A.* Alternative A is the easternmost alternative for Legacy Parkway. It would include overpass structures at Center Street and 900 North in North Salt Lake, 1250 West in Centerville, and Glovers Lane, State Street, and Park Lane in Farmington; two service interchanges at 500 South and Parrish Lane; two frontage roads; and a multiple use trail, landscaping, and noise mitigation (earthen berm at some locations between the highway and the trail). The major environmental impacts associated with Alternative A are summarized in Table 1 below.

*Alternative B.* Alternative B is the westernmost alternative for Legacy Parkway in North Salt Lake and Farmington. It would include overpass structures at Center Street in North Salt Lake and Glovers Lane, State Street, and Park Lane in Farmington. It would also include two service interchanges at 500 South and Parrish Lane, a multiple use trail, landscaping, and noise mitigation. Alternative B would terminate in two locations: at the I-15/US-89 interchange in Farmington and at I-15 in Kaysville, with a split connection branching off at approximately Lund Lane in Farmington. The major environmental impacts associated with Alternative B are summarized in Table 1.

*Alternative C.* Alternative C is the westernmost alternative for Legacy Parkway in Centerville and Woods Cross. It would include overpass structures at Center Street in North Salt Lake and Glovers Lane, State Street, and Park Lane in Farmington. Alternative C would also include two service interchanges at 500 South and Parrish Lane, a multiple use trail, landscaping, and visual and acoustic buffering. The major environmental impacts associated with Alternative C are summarized in Table 1.

*Selected Alternative (Alternative E).* The Selected Alternative follows the same alignment as the Final EIS Preferred Alternative (Alternative D), but reflects a narrower right-of-way width. The southern terminus will be located at the I-215/2100 North interchange in Salt Lake City. From the southern terminus, the highway will proceed north, cross Center Street and 900 North in North Salt Lake, and continue to a point 0.5 km (0.3 mi) west of the intersection of 500 South and Redwood Road in Woods Cross. From 500 South, it will proceed northeast for about 5.6 km (3.5 mi) to Parrish Lane, where it will turn north, cross Parrish Lane, and parallel the eastern side of the D&RG railroad tracks for 1 km (0.6 mi). It will then cross 1250 West in Centerville and continue on a northeast path to the UPRR tracks. From Centerville to Farmington, the highway will parallel the UPRR and I-15 adjacent to the west of the power lines on the western side of the railroad, cross under Glovers Lane and State Street (Clark Lane), and terminate at the interchange of I-15 and US-89 at Park Lane in Farmington.

The Selected Alternative will include five overpass structures: at Center Street in North Salt Lake; at 1250 West in Centerville; and at Glover Lane, State Street, and Park Lane in Farmington. It will also include two service interchanges at 500 South and Parrish Lane, three frontage roads, a multiple use trail, landscaping, and visual and acoustic buffering.

The Selected Alternative includes establishment of the 849-ha (2,098-ac) Legacy Nature Preserve. The Preserve, which will be located west of the Selected Alternative alignment, was developed in collaboration with the U.S. Fish and Wildlife Service (USFWS), the Corps, EPA, and Utah Division of Wildlife Resources (UDWR) to mitigate project impacts on wetlands and wildlife. Properties associated with the Preserve would be acquired by the State in fee simple title and managed by either UDOT or an acceptable third party or parties in perpetuity according to a management plan coordinated with the resource agencies and other interests (see Section J, *Monitoring and Enforcement Program*, below). The major environmental impacts associated with the Selected Alternative are summarized below in Table 1.

**Table 1** Summary of Major Environmental Impacts by Alternative

Impact Category	Alternative			
	A	B	C	E (Selected Alternative)
Wetlands Affected, hectares (acres)				
Filled <sup>1</sup>	43 (107)	74 (182)	59 (145)	45 (113)
Indirectly Affected (at 328-ft right-of-way)	218 (539)	409 (1,011)	367 (907)	233 (575)
Upland Wildlife Habitat within right-of-way, hectares (acres)	195 (483)	262 (647)	189 (466)	186 (458)
Total Property Displacements	116	78	22	28
Residential Relocations	17	14	5	4
Business Relocations	16	10	9	14
Farmstead Relocations	0	2	0	0
Horse Paddock Relocations	16	16	8	10
Platted Lots Displaced	67	36	0	0
Noise (Number of Residences, Including Platted Lots, Affected)	486	250	203	431
Bisection of Local Communities – Approximate hectares (acres) of Developable Uplands West of Alternative Alignments <sup>2</sup>	1,264 (3,123)	844 (2,086)	944 (2,332)	1,125 (2,779)
Archaeological Resources	2	3	2	2
Historic Resources	2	2	2	2
Section 4(f)/6(f) Impact Area, hectares (acres)				
4(f) Area	4.9 (12.2)	21.7 (53.4)	8.5 (21.2)	4.6 (12.0)
6(f) Area	0.3 (0.8)	1 (2.5)	0.3 (0.8)	0.3 (0.8)
Farmland Lost, hectares (acres)				
Prime	9 (23)	36 (88)	11 (28)	11 (27)
State-important	0 (0)	1 (2)	0 (0)	0 (0)
Cost	\$479,929,000	\$547,500,00	\$470,050,000	\$436,078,000

## Notes:

<sup>1</sup> Acreages shown represent the total acreage of wetlands within the right-of-way. However, the actual acreage of wetlands that would be directly filled is estimated to be about 3 to 4 ha (8 to 10 ac) less under Alternatives A and E. A similar reduction could be expected for Alternatives B and C due to design flexibility.

<sup>2</sup> The approximate acreage of developable uplands west of each alternative alignment is based on summary information derived from Tables 4.10b through 4.10f of the Final EIS. This information represents the *relative* impacts of each alternative on community cohesion; the amount of upland area west of a given alignment indicates the area that would be separated from established community resources.

## Identification of Environmentally Preferable Alternatives

Whenever an EIS is prepared, the Council on Environmental Quality (CEQ) NEPA regulations require that the Record of Decision identify all alternatives that were considered, "...specifying the alternative or alternatives which were considered to be environmentally preferable." The environmentally preferable alternative(s) is generally defined as the alternative that causes the least damage to the biological and physical environment, but it should also reflect the alternative(s) that best protects, preserves, and enhances historic, cultural, and natural resources. As shown in Table 1 above, Alternatives B and C would both have substantially more impact on wetlands than Alternative A and the Selected Alternative. Alternative B would result in 74 ha (182 ac) of direct filling of wetlands, and Alternative C would result in 59 ha (145 ac) of direct filling of wetlands—or between 28 and 70 percent more than Alternative A and the Selected Alternative. In addition, Alternative B would require more use of Section 4(f)/6(f) properties than Alternative A and the Selected Alternative; Alternative B would result in use of 21.7 ha (53.4 ac) of Section 4(f) property and 1 ha (2.5 ac) of Section 6(f) property, compared to 4.9 ha (12.2 ac) of Section 4(f) property and 0.3 ha (0.7 ac) of Section 6(f) property under Alternative A and the Selected Alternative. Alternative B would also have the greatest impact on prime farmland, affecting 36 ha (88 ac), followed by Alternative C, which would affect 11 ha (28 ac) of prime farmland. Alternative A and the Selected Alternative would affect 9 ha (23 ac) and 11 ha (27 ac), respectively, of prime farmland. As a result, for purposes of NEPA, Section 4(f) of the Department of Transportation Act, and the Clean Water Act, Alternatives B and C would not qualify as environmentally preferable.

Among the alternatives that would meet the project purpose and need, Alternative A and the Selected Alternative are considered the environmentally preferable alternatives, compared to Alternatives B and C, because Alternative A and the Selected Alternative would have far less impact on wetlands and sensitive wildlife habitats, would use less Section 4(f)/6(f) property, and would result in less loss of acreage of prime farmland. This conclusion is consistent with input received from EPA (see letter from EPA dated March 17, 2005, in Volume 2, Section 3, of the Final Supplemental EIS).

The anticipated impacts and the selected minimization and compensatory mitigation measures that will be implemented as part of the Selected Alternative are described below in Section H, *Measures to Minimize Harm*.

## E. STATE OF UTAH SETTLEMENT AGREEMENT

After the previous litigation delayed the project, resulting in higher construction project costs and adverse transportation impacts, a compromise to end that litigation and avoid future litigation was desirable.

Accordingly, to settle litigation and disputes over Legacy Parkway, a Settlement Agreement was executed on November 14, 2005, between the State of Utah and former plaintiffs and other interested parties. The Settlement Agreement is available in the administrative record and on UDOT's website (<http://www.udot.utah.gov/dl.php/tid=181/save/Legacy%20Settlement%20Agreement%20Signed%2010-31-05.PDF>).

### Terms Specific to the Legacy Parkway Project

The Settlement Agreement includes certain design and operational configurations for Legacy Parkway. Under the Agreement, UDOT has agreed to a posted speed limit of 55 miles per hour (mph), a restriction on large trucks as enacted by the state legislature, noise-reducing pavement, and parkway amenities such as overlooks along the trail. These design and operational configurations are required under the Settlement Agreement only until the year 2020. Noise-reducing pavement and constructed parkway



amenities would be retained beyond 2020, but UDOT could consider the need to raise the posted speed limit and allow large trucks at that time. UDOT's decision to continue these restrictions beyond 2020 will depend on the pace of development and the rate of growth in travel demand. As such, these features are not permanent changes to Legacy Parkway, but rather a phased-in approach to Legacy Parkway operations during the first 12 or 13 years of its operation. It is worth noting that the truck restriction may be lifted in the event of incidents on I-15 or during the period of I-15 reconstruction.

It is expected that the 55 mph speed limit, restriction on large trucks, and noise-reducing pavement will, individually and collectively, result in less noise generated by Legacy Parkway operations than might have occurred without these features. Any reduction in noise levels will lessen noise impact and is considered a benefit of the Settlement Agreement.

It is expected that the addition of parkway amenities under the Settlement Agreement will result in the same or less impact on wetlands as that stated in the Final Supplemental EIS because the width of the project right-of-way will remain the same, 312 ft. Space needed for amenities will be taken from the width dedicated to the buffer, provided wetlands are avoided. The width of the right-of-way used to calculate all impacts in the Final Supplemental EIS was 312 ft, reduced from 328 ft in the Final EIS. (It should be noted that wetlands mitigation was calculated for the Selected Alternative based on impacts resulting from a 328-ft right-of-way.)

To provide more curvature to the roadway to enhance the parkway setting, as required under the Settlement Agreement, UDOT proposes to meander the alignment of the footprint within the 328-ft right-of-way that UDOT has already purchased, provided that any shift reduces impacts on wetlands and other sensitive environmental features located along the edge of the right-of-way. The footprint shifts could also provide additional buffer between the roadway facility and the Legacy Nature Preserve or other adjacent natural resources. The Final Supplemental EIS recognized that UDOT intended to use design flexibility and principles of context-sensitive solutions for Legacy Parkway, in part to further reduce impacts on the environment.

The Settlement Agreement, which terminates on January 1, 2020, sets forth certain terms regarding Legacy Parkway and other transportation projects in the corridor. Under the Settlement Agreement, UDOT has agreed not to expand I-15 in South Davis County until 2020, unless travel demand conditions warrant an earlier expansion date (i.e., level of service conditions on I-15 reach D or worse). Expansion of I-15 in 2020 or later is consistent with the information used in the analysis conducted for the Final Supplemental EIS, which identified the expansion of I-15 as occurring after 2020, as stated in the WFRC long range plan. Travel demand modeling conducted for the Final Supplemental EIS indicates that I-15 may need to be expanded to meet travel demand in 2020, and, as stated previously, the Settlement Agreement allows UDOT to initiate expansion of I-15 prior to 2020 if necessary. UDOT also agreed under the Agreement that Legacy Parkway will not be expanded beyond four lanes prior to 2020. This is consistent with the Final Supplemental EIS and the WFRC long range plan.

Also under the terms of the Settlement Agreement, the former plaintiffs and other interested parties will not bring suit against the recently completed Supplemental EIS nor against this ROD and CWA Section 404 permit action.

Based on these factors, the Corps and FHWA believe that project refinements required under the Settlement Agreement will not result in additional impacts or change conclusions presented in the Final Supplemental EIS.

### **Terms Not Specific to the Legacy Parkway Project**

Although technically unrelated to Legacy Parkway, UDOT will also undertake the following steps pursuant to the Settlement Agreement.

- Provide financial support for a bus rapid transit or light rail transit environmental impact statement.
- Obtain additional mitigation property (121 acres) west of Legacy Parkway near 500 South to be managed for wetlands and wildlife mitigation. Mitigation credits for this property will be available for other transportation projects.
- Establish a voluntary dispute avoidance and resolution process to assist in resolving environmental controversies in advance of and without litigation.

Related to the management of Legacy Parkway mitigation, UDOT will establish a professional Science Advisory Committee to assist with research and information about and concerning the Legacy Nature Preserve.

The 121-ac parcel mentioned in the second bullet will not be used as mitigation for Legacy Parkway, but rather as possible mitigation for other transportation projects in the North Corridor, such as I-15 reconstruction. Once acquired, the site will be managed as a part of the Preserve. In a letter from the Corps to UDOT, dated October 31, 2005, the Corps recognized that acquisition of the site will benefit the Preserve because the land will buffer the Preserve from planned commercial development that could indirectly impact wetlands on the Preserve. The amount of wetland mitigation credit for this additional 121-ac of land will depend on the acres of wetlands on the site and the degree that the protection and management of the property will increase the overall functioning of neighboring wetlands on the Preserve. If UDOT proposes public access or public education facilities on the Preserve, permit conditions will require that UDOT consider prioritizing use of this site over other areas on the Preserve.

### **Relevance of Settlement Agreement to Record of Decision**

The above discussion of the State of Utah Settlement Agreement is included in this decision document for the purposes of full disclosure and federal consideration. As described in 23 CFR §771.113, *Timing of Administration Activities*, the Supplemental Final EIS and this ROD are considered acceptance of the general project location and concepts as described in the Supplemental Final EIS. The terms and conditions of the State of Utah Settlement Agreement are considered design concepts that will be considered after the ROD has been signed. If any of these design changes create a significant environmental impact, appropriate actions will be taken.

## **F. EVALUATION OF THE SELECTED ALTERNATIVE**

The following describes the elements considered in the approval of the Selected Alternative alignment. The discussion is based on the evaluation criteria described above Section D, *Alternatives Considered*, under *Description of the Alternatives Screening Process*.

### **Additional Capacity**

For the Final Supplemental EIS, a level-of-service (LOS) criterion of LOS D or better in the peak period, peak-direction was used to analyze the current and future operating condition of I-15 in the North Corridor. This criterion was used to evaluate how well potential alternatives would meet the primary purpose of relieving traffic congestion on I-15 through 2020. For screening purposes, alternatives were evaluated to see whether they would provide peak-period, peak-direction LOS D or better.

As part of the Supplemental EIS process, revised travel demand modeling was conducted using the WFRC 2004 regional travel demand model (version 3.2). Application of the revised travel demand model confirmed the conclusion in the Final EIS that all the build alternatives would provide the same level of additional capacity in the North Corridor. I-15 would operate at LOS D in 2020 during the peak period,

peak direction under the Shared Solution, which includes a four-lane Legacy Parkway. The revised travel demand model also confirmed that, under the No-Build Alternative, I-15 would operate at LOS F in 2020 during the peak-period, peak direction, further demonstrating that additional traffic lanes are necessary in the North Corridor to meet anticipated traffic demand.

### **Alternate Route**

All the build alternatives would provide an alternate north-south route through the North Corridor. This will better serve through-corridor (non-local) traffic and help meet the 2020 travel demand by limiting the amount of through-corridor traffic that gets diverted onto local streets when I-15 is congested or under construction. In addition, Legacy Parkway will relieve congestion on I-15 during emergency situations and help to ensure access and connectivity for military sites that depend on I-15 as part of the Strategic Highway Network (STRAHNET).

### **Minimization of Environmental and Community Impacts**

Of the four build alternatives, Alternatives B and C would both have substantially more impacts on wetlands than Alternative A and the Selected Alternative, as described above in Section D under *Identification of Environmentally Preferable Alternative*. In addition, although Alternative A and the Selected Alternative would result in similar impacts on the natural environment (Table 1), the Selected Alternative would have substantially fewer impacts on the physical environment: fewer total property displacements; fewer residential, business, and horse paddock relocations; fewer residences affected by noise and visual impacts; and fewer impacts related to disruption of community cohesion.

Identification of the Selected Alternative resulted from an ongoing process of planning and analysis that adjusted the alternative alignments to minimize and avoid adverse biological and physical environmental effects. In accordance with 40 CFR §1508.8, FHWA identified the Selected Alternative after considering direct, indirect, and cumulative effects on ecological resources (natural resources and the components, structures, and functioning of affected ecosystems); aesthetic, historic, and cultural resources; economic and social resources, including community impacts and relocation; and public health.

As explained in the Final EIS and the Final Supplemental EIS, the originally conceived alignment for Legacy Parkway was proposed farther west to allow future development in Davis County. FHWA and the Corps worked with UDOT and other state and local officials to adjust the alignment to the east, thereby reducing potential wetland impacts associated with the build alternatives evaluated in the Final Supplemental EIS. In addition, reduction of the right-of-way width and identification of a larger mitigation preserve than that proposed in the June 2000 Final EIS further minimized and mitigated impacts on natural resources in the study area. Overall, the Selected Alternative will result in reduced environmental effects compared to the project proposed in the June 2000 Final EIS.

### **Cost**

As noted in the Final EIS Record of Decision, the Selected Alternative alignment for Legacy Parkway will cost the least to construct of all the build alternatives. It is estimated that the Selected Alternative will cost \$436,078,000 million to construct, compared to \$479,929,000 for Alternative A (Table 1). As discussed more fully in the Final Supplemental EIS, these cost estimates represent the base costs of construction (including mitigation). Actual contracting involves additional costs, such as pre-award engineering, stipends, and incentives; environmental oversight; and program management.

## G. SECTIONS 4(f) and 6(f)

As described in Chapter 5 of the Final Supplemental EIS, Section 4(f) of the Department of Transportation Act of 1966 (as amended and codified in 49 USC §303) prohibits the Secretary of Transportation from approving any program or project that "...requires the use of publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance...or any land from an historic site of national, state or local significance...unless there is no feasible or prudent alternative to the use of such land, and such program includes all possible planning to minimize harm to such [land]...from such use" (Department of Transportation Act of 1983, 49 USC §303). Section 6(f) of the Land and Water Conservation Fund Act prohibits the conversion of property acquired or developed with a grant under the Land and Water Conservation Fund (LWCF) Act to a non-recreational site without the approval of the U.S. Department of Interior's (DOI's) National Park Service. Section 6(f) directs DOI to ensure that replacement lands of equal value, location, and usefulness are provided as conditions to such conversions.

As part of the NEPA process, FHWA has evaluated the Legacy Parkway project for Section 4(f) and Section 6(f) impacts pursuant to 49 USC §303(c) and 23 CFR §771.135. The Selected Alternative will result in the direct use of one recreation area, three National Register of Historic Places (NRHP)-eligible historic resources, and two NRHP-eligible archeological resources, with a total area of 4.6 ha (12.0 ac), as described below. These impacts have been updated since publication of the Final EIS Record of Decision and reflect revisions to the Selected Alternative alignment, a reevaluation of Section 4(f) and 6(f) resources in the study area, and a reevaluation of potential uses of the Section 4(f) and 6(f) resources in the study area. The following notable changes have occurred since publication of the Final EIS Record of Decision.

- Changes in the acreage of direct uses required from the Jordan River Off-Highway Vehicle (OHV) Center.
- FHWA's determination that none of the build alternatives, including the Selected Alternative, would require either a direct or a constructive use of the specific areas of Bountiful City Pond that are eligible for protection under Section 4(f).
- FHWA's determination that there will be no direct or constructive use of the Farmington Bay Waterfowl Management Area under the Selected Alternative.
- Demolition of the White House, a 4(f) property.
- Disclosure of temporary occupancy for three properties in the Clark Lane Historic District (CLHD) under the Selected Alternative.
- Disclosure of a required direct use of a historic structure at 662 West Clark Lane, portions of the historic D&RG railroad corridor, and two archeological sites for implementation of the Selected Alternative.

### **Recreation, Wildlife, and Waterfowl Refuge Resources**

#### *Utah State Parks Land, Including Jordan River Off-Highway Vehicle Center (Section 4(f) and 6(f) Property)*

The Selected Alternative will require a direct use of 1.0 ha (2.5 ac) of land that is part of the Jordan River Off-Highway Vehicle (OHV) Center. The Jordan River OHV Center is an off-highway vehicle and motocross facility that is owned and managed by the Utah State Parks and Recreation Division as a motorized recreation area. Because it is a publicly owned public park and recreation facility, the site is

considered a 4(f) property. Moreover, a portion (i.e., 3.6 ha [9.0 ac]) of this 125.5-ha (310-ac) property was purchased with funds under Section 6(f)(3) of the LWCF Act, qualifying it as a Section 6(f) property as well.

The land required from the Jordan River OHV Center for construction of the Selected Alternative is needed to accommodate route continuity between I-215 and the Legacy Parkway interchange area. Specifically, a portion of the raceway track associated with the property will be relocated. None of the buildings, motocross courses, or participant or observer facilities will be affected.

There is no prudent and feasible alternative to avoid using land from this resource because, the interchange would have to be designed with substandard geometrics that would not be consistent with current design guidelines established by the American Association of State Highway and Transportation Officials (AASHTO). Therefore, the use of a substandard design would not be prudent. In addition, given that the Selected Alternative will require the use of the least amount of land relative to the other build alternatives (i.e., the same amount of land as Alternatives A and C, and less than Alternative B), and because the impacts on both the raceway track and operation of the Jordan River OHV Center will be minor, it is not prudent to use the substandard geometric design at this interchange.

The land used will be replaced with approximately 6.6 ha (16.2 ac) of land of equal value, location, and usefulness, as agreed to by the Utah State Parks and Recreation Division. This constitutes all possible planning to mitigate this use and satisfies Section 6(f) of the Land and Water Conservation Fund Act.

### **Historic Resources**

#### *White House at 10 North 650 West, Farmington (Section 4[f] Property)*

As described in the Final EIS Record of Decision, the White House property was a historic structure eligible for listing on the NRHP and, therefore, eligible for protection under Section 4(f). Located at the northeastern corner of the 650 West and Clark Lane (State Street) intersection in Farmington, acquisition of the 0.6-ha (1.5-ac) property and demolition of the structure was required under all the build alternatives for construction of the State Street overpass crossing I-15. State Street is the primary east-west connection between parts of Farmington and is necessary for transportation and community cohesion. Relocating State Street and the overpass to avoid the White House would have caused substantial alternate adverse community impacts and disruption. Accordingly, after the Final EIS was published, and in accordance with the June 2000 Memorandum of Agreement (MOA),<sup>1</sup> the building was documented to Utah State intensive level survey (ILS) standards and demolished. Because the documentation and demolition of this structure has already been completed, a direct use of the property has already occurred.

#### *Clark Lane Historic District, Farmington (Section 4[f] Property)*

The Clark Lane Historic District (CLHD) was nominated for listing in the NRHP as a historic district in 1994. The western boundary of the CLHD is the State Street overpass of I-15, which will be reconstructed under the Selected Alternative. At the request of the City of Farmington and since publication of the Final EIS, the design of the State Street overpass has been revised, in part to eliminate the need to acquire property from any contributing element of the CLHD. However, the driveways of three properties within the CLHD—399 W. State Street, 393 W. State Street, and 398 W. State Street—would require minor regrading to connect with the new overpass. These modifications, which are described in detail in Chapter 5, *Section 4(f) and 6(f) Evaluation*, of the Final Supplemental EIS, were

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<sup>1</sup> The June 2000 MOA was signed by the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officer (SHPO), FHWA, UDOT, and the Utah Division of Indian Affairs, with tribal concurrence from the Northwest Band of Shoshone of the Shoshone Nation, Idaho and Utah.

determined to have no adverse effect under Section 106 of the National Historic Preservation Act (NHPA) because of the design and mitigation measures included in the September 2005 MOA.<sup>2</sup>

Avoidance alternatives and measures to minimize harm are not described for the CLHD in the Final Supplemental EIS because the Selected Alternative will result in a temporary occupancy of the CLHD, not a direct or constructive use under Section 4(f). Specifically, reconstruction of the driveways of the three properties described above will alter only the driveway footprint, not the actual structures. A total of 121 square meters (sq m) (1,307 square feet [sq ft]) of the properties at 399 W. State Street and 398 W. State Street will be modified through regrading and fill placement to provide new, permanent driveway access to both properties. The footprints of the properties at 399 W. State Street and 393 W. State Street will be increased by a total of 99 sq m (1,068 sq ft) because of realignment of existing curbs and gutters and a more gradual tapering of the road cross section from east to west. A temporary construction easement will affect a total of 46 sq m (508 sq ft) of the footprint of the property at 398 W. State Street. In addition, as discussed more fully in the Final Supplemental EIS, the September 2005 MOA includes measures to minimize the potential for harm to the CLHD from vibration resulting from reconstruction of the State Street overpass, including not using State Street as a principle haul route, pre-drilling pilings, limiting the energy of piledriving hammers, monitoring vibration, and establishing a vibration threshold.

*662 West Clark Lane, Farmington (Section 4[f] Property)*

The historic structure located at approximately 662 West Clark Lane in Farmington is an animal facility that sits on a 0.19-ha (0.49-ac) parcel, of which 0.08 ha (0.21 ac) is historic and eligible for protection under Section 4(f). Implementation of the Selected Alternative will require the direct use of 0.02 ha (0.06 ac) of this property and construction of a retaining wall to avoid demolition of the structure. This use is required for acquisition of the right-of-way necessary to complete the northern interchange and system-to-system connection between Legacy Parkway, I-15, and US-89. Avoiding the direct use of this property would require relocating the entire northern interchange, which is not prudent.

Alternative B would not require a direct use of 662 West Clark Lane because it connects to I-15 in Kaysville where the right-of-way required for the interchange is smaller. Although Alternative B would avoid the direct use of this historic animal facility, it would result in a direct use of the historic structure at 1300 Glovers Lane in Farmington, also a Section 4(f) Property.

*D&RG Railroad (Section 4 [f] Property)*

The historic D&RG Railroad corridor, which reached Salt Lake City in 1882, runs north–south through the study area. Ties and tracks are still present in some areas, and sections of the D&RG railroad are still actively used to provide a freight transportation link to the petroleum refineries in North Salt Lake, Woods Cross, and West Bountiful. FHWA, in coordination with SHPO, has determined that the D&RG Railroad corridor is eligible for listing in the NRHP and is eligible for protection under Section 4(f).

In addition to being a Section 4(f) resource because of its NRHP eligibility, the D&RG Railroad corridor is also a planned recreation trail. UTA has applied to WFRRC for funds to convert the railway grade to a pedestrian/bicycle trail from West Bountiful to the Roy area in Weber County. The D&RG Railroad corridor is therefore considered formally designated for recreation and eligible for protection under Section 4(f). However, the D&RG Railroad recreation trail is being planned jointly with the development of the Legacy Parkway Trail. Consequently, FHWA has determined that the requirements of Section 4(f) do not apply to the subsequent highway construction of the reserved right-of-way as previously planned.

The Selected Alternative will require construction of two at-grade crossings of the D&RG Railroad Corridor, which will result in the direct use of 0.4 ha (0.9 ac) of land. The first crossing, which will be

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<sup>2</sup> The September 2005 MOA was signed by the ACHP, SHPO, the Utah Division of Indian Affairs, FHWA, and the Corps.

located just south of Parrish Lane in Centerville, will be required to accommodate north- and southbound mainline travel lanes, the northbound offramp to Parrish Lane, the southbound onramp to Legacy Parkway, and the Legacy Parkway multi-use trail. As described in the Final Supplemental EIS, the mainline crossing would sever the tracks, and the planned recreation trail was planned to be re-routed onto Parrish Lane structure across the Legacy Parkway mainlines and back to the railroad corridor. The second crossing, which will be located just north of Chase Lane in Centerville, will be required to accommodate an access road to the Utah Power and Light and Bountiful City power substations. The proposed crossing of the access road will only require minor modification of the D&RG at the approximately the same elevation as the existing railroad bed. This crossing will not affect the integrity of the railroad corridor or the planned recreation trail. As described in the Final Supplemental EIS, both of these crossings will use the D&RG Railroad grade and incorporate a total of approximately 335 linear meters (1,100 linear feet) of the D&RG railroad grade into the roadway embankment. The Selected Alternative will not require use of the section of the railway currently being used for operations or where contributing features or elements are present, other than the railway grade. SHPO has concurred that crossing the D&RG Railroad at grade would result in no adverse effect.

As described in Section 5.6.5 of the Final Supplemental EIS, avoidance alternatives for the D&RG Railroad evaluated bridging the railroad at two locations with 3 m (10 ft) of vertical clearance. Constructing these bridges would require additional earthwork to raise the grade to and from the roadway bridges, and would require construction of retaining walls to maintain the resulting embankments. The Final Supplemental EIS reported the estimated cost to implement this avoidance alternative at approximately \$8,000,000, roughly 23 times the estimated \$350,000 cost for the two at-grade crossings.

After the Final Supplemental EIS was published, detailed design work of the Selected Alternative in the area of Parrish Lane was conducted in coordination with UTA. Based on the results of this detailed design work, UDOT determined that it was feasible and a benefit to the community, trail users, and the historic resource to span the D&RG. Also based on this additional work, the mainline crossing just south of Parrish Lane in Centerville has been changed to incorporate an arch crossing of the D&RG Railroad bed, which will avoid the use of the historic railroad at this location. The arch crossing will span the rail bed to provide a 10-ft vertical clearance at its apex. This design refinement will allow that the planned D&RG recreation trail be continuous. The mainline arch crossing of the D&RG will reduce the direct use of this historic resource by 0.3 ha (0.7 ac), and will not result in additional impacts on the historic resource, wetlands, or wildlife habitat. The at-grade crossing of the access road just north of Chase Lane in Centerville will remain as described in the Final Supplemental EIS, with a minor impact on approximately 0.1 ha (0.2 ac) of the D&RG railroad grade. Avoidance of the at-grade crossing of the access road is not prudent because it would cut-off access to the Utah Power and Light and Bountiful power sub-stations.

SHPO has concurred that there will be no adverse effect on the historic corridor as a result of Legacy Parkway crossings of the D&RG.

### **Archaeological Resources**

#### *Site 42Dv2 (Section 4[f] Property)*

Site 42Dv2 is a large prehistoric campsite, located in an area acquired for the southern interchange with I-215. Although it was identified as an archeological resource in the Final EIS, the site did not warrant preservation in place and was therefore not considered eligible for protection under Section 4(f).

During data recovery, human remains were encountered on the site. Excavations were halted after it was determined that construction of Alternative D (Final EIS Preferred Alternative) would not require further disturbance of the site. The current site boundaries indicate that 42Dv2 is within the right-of-way of the Selected Alternative but not within the actual construction footprint. FHWA has determined that, because

human remains were encountered and because there is sufficient potential for additional human remains to be present on the site, 42Dv2 now warrants preservation in place and therefore qualifies for protection under Section 4(f). This determination was based on the significance of the site and sanctity of grounds containing human remains.

As described above, partial excavation of the site has already occurred. Although additional work will not take place within the boundaries of the site, acquisition of the right-of-way for the southern interchange for the Selected Alternative will constitute a direct use of 2.9 ha (7.2 ac) of the site. Given that the southern interchange location is determined, in part, by the location of the existing facilities associated with I-215, as well as the fact that this location allows the proposed trail to connect with the existing trail system, the property containing site 42Dv2 must be acquired for incorporation into the Selected Alternative right-of-way.

The Alternative B southern interchange alignment would avoid the incorporation of Site 42Dv2 into the right-of-way, but would result in greater impacts on other resources, including prime farmland, a Century farm, and two multigenerational farms, than would the Selected Alternative. Based on these additional impacts, and the fact that 42Dv2 will not be further affected as a result of the Selected Alternative, FHWA has concluded that the Alternative B southern interchange is not a prudent alternative to the direct use of site 42Dv2.

Archaeological data recovery of the portion of the site that was previously excavated will continue in accordance with the September 2005 MOA. Impacts on the site will be further minimized by installing fencing around the site during construction.

#### *Site 42Dv94 (Section 4[f] Property)*

Site 42Dv94 is a prehistoric site that was discovered in 2002 during maintenance activities associated with the proposed action. The site contained human remains found at the eroding margins of the City Drain Canal in North Salt Lake. The human remains have been fully excavated per the inadvertent discovery procedures outlined in the original June 2000 MOA. The current site boundaries indicated that the site is located within the right-of-way for the southern interchange associated with the Selected Alternative.

FHWA has determined that, because human remains were encountered and because there is sufficient potential for additional human remains to be present on the site, 42Dv94 warrants preservation in place and therefore qualifies for protection under Section 4(f). This determination was based on the sanctity of grounds containing human remains.

As described above, partial excavation of the site has already occurred. Although additional work will not take place within the boundaries of the site, acquisition of the right-of-way for the southern interchange for the Selected Alternative will still constitute a direct use of 0.02 ha (0.04 ac) of the site. Given that the southern interchange location is determined, in part, by the location of the existing facilities associated with I-215, as well as the fact that this location allows the proposed trail to connect with the existing trail system, the property containing site 42Dv94 must be acquired for incorporation into the Selected Alternative right-of-way.

The Alternative B southern interchange alignment would avoid the incorporation of Site 42Dv94 into the right-of-way because the southern interchange is in a different location farther south and east. However, for the same reasons described above for 42Dv2 (i.e., impacts on other resources and the fact that 42Dv94 would not be further affected by the Selected Alternative), FHWA has concluded that the Alternative B southern interchange is not a prudent alternative to the direct use of site 42Dv94.



Archaeological data recovery of the portion of the site that was previously excavated will continue in accordance with the 2005 MOA. Impacts on the site will be further minimized by installing fencing around the site during construction.

### **Interagency Consultation and Coordination**

Interagency consultation concerning the 4(f) and 6(f) properties has been completed. This coordination involved the Utah Department of Natural Resources UDWR and the Division of Parks and Recreation; the City of Bountiful; the Corps; DOI; the Utah SHPO and ACHP; and affected Native American groups. Based on these consultations and all information in the record, FHWA concludes that there is no feasible and prudent alternative to the use of the land from the Section 4(f) and 6 (f) properties and that the Selected Alternative includes all possible planning to minimize harm to these properties resulting from such use.

### **H. MEASURES TO MINIMIZE HARM**

The Selected Alternative alignment was designed to avoid and minimize adverse environmental impacts. As described in Chapter 3, *Alternatives*, of the Final Supplemental EIS, the configuration and location of the Selected Alternative was refined during the NEPA and transportation planning processes to reflect an alignment that minimizes impacts on sensitive natural resources while meeting transportation and land use planning needs of the local communities in the study area.

Having taken steps to avoid and minimize impacts by adjusting the alignment, UDOT also identified ways to further minimize and/or compensate for unavoidable adverse impacts associated with the Selected Alternative. The anticipated impacts and the selected minimization and compensatory mitigation measures that will be implemented are summarized in Table 2. Chapter 4, *Supplemental Environmental Analysis*, of the Final Supplemental EIS provides a complete discussion of the environmental consequences of the Selected Alternative.

**Table 2** Mitigation Summary for Selected Alternative

Impact Category	Mitigation Measures
<b>Land Use</b>	None.
<b>Farmland</b>	Owners of farmland directly within the Legacy Parkway right-of-way will be compensated according to requirements of the URAA and other state and federal guidelines. In the case of indirect impacts, UDOT will determine whether (based on the comparative costs) access is restored or the remainder of the farmland is purchased. These mitigation measures do not replace any farmland taken by the project.
<b>Social</b>	
<i>Socially Disadvantaged Groups and Environmental Justice Populations</i>	Business displacement assistance will be provided to Commercial Coatings, pursuant to the eligibility and other requirements of the URAA.
<i>Public Facilities</i>	Compensation will be provided for the real property taken or damaged or the publicly owned real property will be functionally replaced with another facility that will provide an equivalent use.
<i>Public Services and Utilities</i>	The relocation of utilities will cause possible impacts on wetlands, farmlands, and native vegetation. Generally, these impacts will be temporary in nature. Disturbed areas from pipeline relocations will be backfilled and restored to their pre-construction contours.  Mitigation measures for impacts on wetlands and farmland are described below.
<i>Recreation Resources</i>	Motorized vehicles will access the Farmington Bay Waterfowl Management Area (FBWMA) by taking the 500 South exit off Legacy Parkway and the corresponding frontage road. Similarly, motorized vehicles will access Bountiful City Pond by taking the 500 South exit and the frontage road along the west side of Legacy Parkway. Non-motorized access will be provided to both the FBWMA and the Bountiful City Pond by the frontage roads that run along the west side of the proposed alignments. Access to the frontage roads will be provided at 500 South.  Mitigation for impacts on the recreation resources will be accomplished by replacing the lands lost and reshaping the shoreline to provide an equivalent area for users of the pond.
<b>Relocations</b>	
<i>Residential Business</i>	Relocation assistance will be provided to the affected households, pursuant to the eligibility and other requirements of the URAA.  Business relocation and re-establishment assistance will be provided to the affected businesses, pursuant to the eligibility and other requirements of the URAA.

Impact Category	Mitigation Measures
<i>Farm and Horse Paddocks</i>	Assistance will be provided to the affected farmstead and horse paddock operations, pursuant to the eligibility and other requirements of the URAA.
<b>Economic</b>	None.
<b>Joint Development</b>	The 312-ft highway right-of-way proposed for this project includes room for the trail. Impacts on wetlands, farmlands, and wildlife from the trail will be included in the mitigation for the overall project.
<b>Pedestrian and Bicyclist Considerations</b>	None.
<b>Air Quality</b>	Non-tailpipe PM10 emissions will be minimized through street sweeping, minimal use of sand for snow and ice control, and other general maintenance measures performed by UDOT. See the discussion of construction impacts below for mitigation for construction-related air quality impacts.
<b>Noise</b>	None.
<b>Water Quality</b>	Through coordination with the Corps, UDEQ, and UDOT, mitigation requirements were selected to provide acceptable water quality protection once Legacy Parkway is operational. The following mitigation will be provided. <ul style="list-style-type: none"> <li>• <u>Minimization of salting.</u> UDOT will minimize salting on the roadway to the extent practicable.</li> <li>• <u>Retention pond.</u> UDOT will construct a retention pond near Center Street to retain sufficient runoff from a 100-year-storm flow to prevent discharge to the Jordan River.</li> <li>• <u>Minimization of concentrated discharges.</u> Legacy Parkway will be constructed without curbs so that stormwater runoff will sheetflow off the highway. Stormwater will be concentrated only where necessary (i.e., to collect drainage on overpasses). This concentrated stormwater will not be discharged directly into wetlands or into streams with quantitative water quality standards. Instead, concentrated discharges will be routed over vegetated buffer strips (grassy median) or dissipated back to sheetflow.</li> <li>• <u>Vegetated filter strips.</u> Roadway design will include vegetated filter strips (grassy median and sideslopes) to improve the quality of water runoff from the highway, as recommended by the Corps and UDEQ. All cleared areas within the right-of-way except the paved surface will be vegetated to filter suspended particles, metals, oils, and greases from the runoff.</li> </ul>

Impact Category	Mitigation Measures
	<ul style="list-style-type: none"> <li>• <u>Surface water conveyance.</u> Runoff on the upstream side of the road will gradually flow to the toe of the roadway slope and/or the berm, then cross under the road through small surface water conveyances. The conveyances will be positioned to maintain sheetflow conditions across the study area to the extent practical, minimize concentrated discharges for water quality and wetland mitigation, and, at a minimum, limit culverted discharges to less than 5 cu ft per second. Surface water conveyances will be installed in areas where an existing hydrologic connection will be cut off by the proposed highway. The conveyances will be designed to pass surface water through the road in the direction or directions of its existing flow. The conveyances could be many types of drainage structures, including culverts, series of small culverts, French drains, corrugated strip drains, synthetic drainage nets, and gravel layers.</li> <li>• <u>Floodplain equalization culverts.</u> Based on specific hydraulic design information, UDOT and the Corps determined that equalization culverts for the purpose of equalizing floodwaters across the road will only be needed within the Corps floodplain boundary (4,217 ft), rather than along entire length of the proposed roadway.</li> <li>• <u>Groundwater conveyance.</u> Groundwater conveyance structures will be installed to mitigate the potential impact of the road embankment, consolidating underlying soils and impeding groundwater flows. Groundwater conveyances will be installed in areas where fill heights exceed approximately 10 ft and will extend from the eastern fill limit to the western fill limit.</li> <li>• <u>Scour and erosion protection.</u> If warranted, scour protection to mitigate downstream erosion will be provided at all culvert outlets and stream crossings, based on a case-by-case analysis to determine outlet velocities. Velocities will be calculated for 50-year storm flows except at stream crossings, where the 100-year storm flow will be used. For velocities greater than 4 ft per second but less than 15 ft per second, loose riprap will be provided, based on UDOT design guidelines (Utah Department of Transportation 2004). For velocities greater than 15 ft per second, an energy dissipater will be provided.</li> </ul>
<i>Groundwater Rights</i>	UDOT will either purchase the groundwater right from the owner or pay for a transfer of the right. The determination will be made on a case-by-case basis.
<b>Permits</b>	None.

## Impact Category      Mitigation Measures

**Wetlands (Direct and Indirect)**

The restoration and enhancement of habitat on the Legacy Nature Preserve will mitigate the wetland impacts. The extent of the Legacy Nature Preserve has been modified since publication of the Final EIS. In addition to the 317 ac of mitigation lands added at the request of USFWS, four additional parcels totaling 530 ac were added to the Legacy Nature Preserve at the request of EPA. The incorporation of these additional parcels will create a 2,098-ac mitigation preserve.

To mitigate the loss of 103 acres of wetlands and indirect effects on 605 acres of wetlands, the following will be provided in accordance with Appendix F, *Draft Wetlands Mitigation Plan*, of the Final Supplemental EIS:

Jurisdictional Areas	MITIGATION (acres)			
	Active Restoration <sup>a</sup>	Overall Restoration <sup>b</sup>	Creation	Re-establishment <sup>c</sup>
Marsh	34	113	0	0
Wet Meadow	90	262	12	8
Playa	63	163	0	0
Unconsolidated Shore	0	48	0	0
Open Water	2	4	0	0
<b>Total</b>	<b>189</b>	<b>589</b>	<b>12</b>	<b>8</b>
				<b>798</b>

<sup>a</sup> Active restoration encompasses measures such as modifications to hydrology (for example, restoring water to the Jordan River floodplain, filling in drainage ditches, and relocating artesian wells to restore wetland hydrology).

<sup>b</sup> Overall restoration includes measures implemented throughout the Preserve such as site protection (external fencing), control of noxious / invasive species, removal of trash and debris, and removal of land uses such as livestock grazing to manage lands for wildlife.

<sup>c</sup> Re-establishment on the Preserve consists of removing fill material at several dump sites resulting in rebuilding former wetlands to yield a gain of wetland acres.

<sup>d</sup> Values are rounded to the nearest whole number. Summing the values in the mitigation total column would equal 799 acres; however, 798 acres is accurate.

Impact Category	Mitigation Measures
	<p>The following summarizes the status of the mitigation measures included in the Draft Mitigation Plan. Mitigation activities that have been completed are shown in standard text; measures that have yet to be completed are shown in italics.</p> <ul style="list-style-type: none"> <li>• <u>Road removal.</u> More than 8,000 linear feet of dirt roads have been removed and revegetated, resulting in the conversion of these areas to 2.3 acres of improved wildlife habitats and adjacent habitat connectivity. <i>More than 31,000 linear feet of roads in the Preserve remain that are slated for abandonment and/or removal (estimated 3.4 acres).</i></li> <li>• <u>Fill, debris, and structure removal.</u> More than 3,000 dump truckloads of debris and fill material have been removed (about 900 tires, extensive cement piles, five car frames); five large structures have been removed; and more than 8 acres of wetlands have been re-established. <i>Additional areas containing fill and debris have been identified for future cleanup.</i></li> <li>• <u>Drainage ditches fill in.</u> To restore the natural water table, more than 18,000 linear feet of ditches have been filled in with spoils and contoured back to natural topography. <i>A few smaller sections of ditches remain to be filled.</i></li> <li>• <u>Internal fence removal.</u> All 10,000 linear feet of fences within the Preserve have been removed.</li> <li>• <u>Perimeter fence installation.</u> Approximately 70% of the 6-mile perimeter fencing for the Preserve has been installed to reduce human disturbance. <i>The perimeter of remaining accessible Preserve areas will be fenced (where not adjacent to other protected areas).</i></li> <li>• <u>Livestock grazing prohibition.</u> Between 60% and 70% of the 2,100-acre Preserve was previously subject to grazing. All grazing within the Preserve has been prohibited. <i>Controlled grazing may be considered for managing habitat.</i></li> <li>• <u>Utility relocation.</u> Two major utility lines previously within the Preserve have been relocated to outside the Preserve. <i>Coordination with PacifiCorp is ongoing to minimize wildlife disturbance.</i></li> <li>• <u>Hydrologic restoration.</u> Extensive restoration activities have been completed for the Jordan River floodplain and adjacent areas, as follows: (1) the Old Jordan River oxbow and channel, called the Mini Jordan River, has been recreated, totaling 1.5 mi; (2) an island called Lord Byron's Island has been created within the Mini Jordan River; (3) 1,280 ft of meander channel have been constructed; (4) a water delivery and control system has been designed and constructed; (5) water rights have been obtained. <i>Implement adaptive management plan in order to manage Preserve hydrology to benefit wildlife.</i></li> <li>• <u>Noxious weed and invasive species control.</u> Comprehensive surveys of noxious weeds/invasive species have been completed and adaptive management measures to control undesirable plants have been initiated. <i>Surveys and initial treatment results will be used to develop and implement an appropriate control plan.</i></li> </ul> <p>Additional measures specific to the implementation and compliance with the wetland mitigation plan are included in the Corps 404 permit #200350493, under <i>Special Conditions</i>.</p>

Impact Category	Mitigation Measures
<b>Wildlife (Direct and Indirect)</b>	
<i>Acres</i>	<p>Based on the analysis presented in Section 4.13, <i>Wildlife</i>, of the Final Supplemental EIS, the restoration and enhancement measures for the Legacy Nature Preserve will mitigate the direct loss of wildlife habitat, habitat fragmentation, and noise impacts (see the discussion of wetlands mitigation above). The Legacy Nature Preserve will provide wetland and upland habitat at about a 3:1 acre ratio of mitigation habitat to direct habitat loss for a wide variety of species, including migratory birds. The wetland restoration measures for the Legacy Nature Preserve (see the discussion on wetlands above) will also benefit wildlife. The Legacy Nature Preserve will provide wetland and upland habitat for a wide variety of species. An additional 317 ac of mitigation lands proximate to the FBWMA were added to the Legacy Nature Preserve, at the request of USFWS, to offset wildlife impacts not captured by the wetland functional assessment models. In addition, four additional parcels totaling 530 ac were added to the Legacy Nature Preserve to address EPA's concerns regarding the adequacy of the mitigation package. The incorporation of these additional parcels directly into the mitigation package will result in preservation of an 2,098-ac area.</p> <p>As additional mitigation for unquantifiable impacts on bird populations from project noise, UDOT has committed to providing maximum of \$250,000 of State funds to a study to determine the effects of highway noise on bird populations in the project area and comparable habitats. The study, which is being collaboratively designed by the federal lead agencies, UDOT, USFWS, and UDWR, will include the monitoring of bird populations and noise before, during, and after construction of the highway. The results of the monitoring will be used to develop a tool for the analysis of noise impacts on wildlife for future projects. A statement of commitment outlining the specifics of the noise study, and signed by the federal lead agencies, UDOT, and the resource agencies, is included in Appendix H, <i>Statement of Commitment</i>, of the Final Supplemental EIS.</p> <p>Based on the analysis presented in Section 4.13, <i>Wildlife</i>, the Legacy Nature Preserve will mitigate the direct loss of wildlife habitat, habitat fragmentation, and noise impacts.</p>
<i>Streams</i>	<p>The Jordan River will be bridged, and natural stream substrate culverts will be used along perennial streams (Farmington Creek) and other large drainages requiring culverts larger than 4 ft in diameter to facilitate movement of fish and other aquatic wildlife. The culverts will be placed at an elevation that will retain natural stream substrates and have the greatest value in maintaining natural conditions.</p>
<i>Vegetation</i>	<p>The right-of-way will be landscaped with non-invasive vegetation.</p>
<i>Equalization Culverts</i>	<p>Culverts will be installed to allow floodwater during Great Salt Lake's high-water years to pass beneath the roadway and supply wildlife habitat east of the right-of-way. In addition, vegetated filter strips and surface water conveyance structures will be incorporated into the project design to minimize impacts on water quality and hydrology. These structures are described in the discussion of water quality mitigation above.</p>
<i>Birds</i>	<p>Raptors. Preconstruction surveys of known raptor nests will be conducted within the Legacy Parkway corridor by a qualified wildlife biologist to determine which nests are active. If nests are determined active, coordination with USFWS and UDWR will occur, and appropriate actions under the Migratory Bird Treaty Act and USFWS Raptor Guidelines (Romin and Muck 1999) will be followed to ensure the least amount of impact on the species.</p>

Impact Category	Mitigation Measures
	<p><u>Peregrine Falcon</u>. Also see the section on threatened and endangered species below. UDOT will prevent construction activities from impacting nesting peregrine falcons by implementing the following measures.</p> <p><i>Construction Activities.</i></p> <ul style="list-style-type: none"> <li>• UDOT will require a qualified wildlife biologist to monitor the nest for any activities occurring within 1 mi of the nest from the courtship through post-fledgling dependency periods (about a 126-day period from February 1 through August 31). If, during monitoring, the peregrine falcons appear disturbed in any manner, construction activities will immediately cease and UDOT will immediately consult with USFWS before continuing construction activities.</li> </ul> <p><i>Human Use.</i></p> <ul style="list-style-type: none"> <li>• Human use of project lands will be controlled to prevent any take (particularly harm and harassment) of nesting peregrine falcons and/or their young.</li> <li>• Project employees will be informed of the presence of the peregrine falcon and the need to minimize disturbance during nesting.</li> <li>• No recreational trail facilities that encourage extended human use of the area (for example, picnic tables and rest areas) will be constructed on project lands within 1 mi of the nest and roost sites. Additionally, no animals, including livestock and/or pets, will be allowed on mitigation properties.</li> <li>• Right-of-way fences will be constructed and maintained along the length of the Parkway.</li> </ul> <p><u>Bald Eagle</u>. See the section on threatened and endangered species below.</p>
<b>Floodplains</b>	<p>The road elevation will be sited above the 100-year flood elevation of the streams that the project crosses and Great Salt Lake. Any damage sustained by the new roadway when the lake level is high will be corrected through road maintenance. Major drainage structures will be designed to pass the 100-year flood without overtopping the road or changing the regulatory floodway. Riprap and other measures will be provided at the ends of drainage structures to control erosion where appropriate.</p>
<i>Equalization Culverts</i>	<p>Floodplain equalization culverts will be constructed within the Corps floodplain to allow floodwater to pass back and forth beneath the roadway to preserve the natural and beneficial floodplain.</p>



Impact Category	Mitigation Measures
<b>Threatened and Endangered Species</b>	
Wildlife -- Birds	<p>The Legacy Nature Preserve will provide long-term benefits for avian species. Additional reasonable and prudent measures and their terms and conditions based on the USFWS Biological Opinion are outlined below. Because the peregrine falcon has been delisted as an endangered species, the terms and conditions of the biological opinion with respect to peregrine falcon are no longer considered nondiscretionary under authority of the ESA. However, USFWS still recommends implementation of these measures.</p> <p><u>Bald Eagle.</u> To prevent construction activities from impacting nesting or wintering bald eagles:</p> <ul style="list-style-type: none"> <li>• No construction activity will occur from the courtship through incubation/brood rearing periods (approximately January 1 through May 21) within 1 mile of a bald eagle nest.</li> <li>• During the nestling through post fledging dependency period (approximately May 21 through August 31), the 1-mile buffer may be changed to 0.5 mile for some activities. Coordination with and concurrence from USFWS must occur prior to any activities occurring under this condition.</li> <li>• The Corps and/or FHWA will require continuous monitoring of the bald eagle nest by a qualified wildlife biologist for activities occurring within 1 mile of a bald eagle nest.</li> <li>• If, during monitoring, bald eagles appear disturbed in any manner, construction activities will immediately cease, and the Corps and/or FHWA will immediately follow the reporting requirement issued in the biological opinion.</li> </ul> <p>No construction activities will occur from November 1 through March 31 within 0.5 mile of bald eagle winter roosting sites.</p> <p><u>Bald Eagle (and Peregrine Falcon).</u> To control human use of the area to prevent take, particularly harm and harassment, of nesting and wintering bald eagles and peregrine falcons and/or their young:</p> <ul style="list-style-type: none"> <li>• Project employees will be informed of the presence of bald eagles and peregrine falcons and the need to minimize disturbance during nesting and wintering periods.</li> <li>• No recreational trail facilities that encourage extended human use of the area will be constructed within 1 mile of nest and roost sites.</li> <li>• Right-of-way fence will be constructed and maintained along the length of the highway to deter human use of the proposed Legacy Nature Preserve.</li> </ul> <p>To prevent highway maintenance activities from impacting nesting bald eagles and peregrine falcons over the life of the project:</p> <ul style="list-style-type: none"> <li>• No maintenance activities that result in noise or activity levels above that of normal highway operation conditions will be conducted within 1 mile of peregrine falcon aeries and 1 mile of bald eagle nest sites during the breeding season.</li> <li>• No maintenance activities that result in noise or activity levels above that of normal highway operation conditions will be conducted from November 1 through March 31 within 0.5 mile of bald eagle winter roost sites.</li> </ul>

Impact Category	Mitigation Measures
<b>Historic and Archaeological Resources</b>	
<i>Historic Structures</i>	<p>The White House at 10 North 650 West in Farmington has been demolished since publication of the Final EIS in 2000. Mitigation for this adverse impact was completed by documenting the building to Utah State Intensive Level Survey (ILS) standards before its removal.</p> <p>Historic Properties eligible under criterion C will be documented to Utah State ILS standards prior to demolition. Mitigation of adverse affects on the historic structures at 1300 W. Glover Lane and 662 W. Clark Lane, both in Farmington, will be conducted according to the September 2005 MOA. Mitigation measures will include preparation of an ILS form, photographic documentation of the structures, preparation of illustrated floor plans, archival research, and a submittal to the Utah Division of History, Preservation Section. In addition to the ILS documentation, a retaining wall will be built for 662 W. Clark Lane.</p> <p>The September 2005 MOA includes design mitigation measures to ensure that project-related impacts on the Clark Lane Historic District (CLHD) are minimized and that the CLHD and its contributory elements are returned to their original pre-construction condition. The September 2005 MOA also includes measures to minimize potential harm from construction-related vibration.</p>
<i>Prehistoric and Archaeological Sites</i>	<p>Archeological sites will be excavated and data recovered in accordance with the September 2005 MOA. All activities will be coordinated with the SHPO and the ACHP. The MOA was also distributed to regional Native America Tribes for their concurrence.</p> <p>Mitigation will be required for any NRHP-eligible archaeological site physically affected by construction. Typical mitigation measures for NRHP-eligible archaeological sites include archival investigations, development of a data recovery plan, and consultation between FHWA, UDOT, SHPO, the tribes, and other consulting parties. To date, consultation with SHPO has resulted in the following specific mitigation measures.</p> <ul style="list-style-type: none"> <li>• In accordance with the September 2005 MOA, the site limits of 42Dv2 and 42Dv94 will be delineated and protected from construction activities through the use of construction fencing.</li> <li>• To minimize impacts on 42Dv70, a professional archaeologist will monitor excavation and earthmoving activities associated with highway construction in the vicinity of the site. If the monitoring archaeologist determines during the design-bid-build process that the site boundaries extend into the construction footprint, data recovery will be initiated in accordance with the September 2005 MOA.</li> </ul> <p>In addition, the Legacy Nature Preserve mitigation plan will include a management plan to ensure the future health of cultural resources within the boundaries of the Legacy Nature Preserve.</p>
<i>Historic Railroad Corridors</i>	<p>SHPO concurred that the Selected Alternative will have no adverse effect on the NRHP-eligible D&amp;RG Railroad corridor or the NRHP-eligible UPRR corridor. No mitigation measures are proposed.</p>

Impact Category	Mitigation Measures
<b>Hazardous Waste Sites</b>	<p>Measures will be implemented to prevent the spread of contamination and worker exposure to contaminants during construction. In the case of known chemical hazards, the site remedy may be negotiated through the U.S. EPA and/or UDEQ; remedial action will be conducted by a qualified hazardous waste contractor certified by the U.S. OSHA. If contamination by unknown chemical hazards is suspected, the Parkway construction contractor will stop work. The contractor will employ the services of a certified industrial hygienist and environmental scientists who can identify the nature of the hazard and appropriate response measures.</p> <p>The Northwest Oil Drain site will be mitigated by avoidance through bridging.</p> <p>The impacts on the Bountiful Sanitary Landfill will be mitigated by relocating the facilities and removing landfill waste material located within the right-of-way, and disposing of it at a permitted facility.</p>
<b>Visual Resources</b>	<p>Revegetation of the highway grade will help soften the visual impacts of the highway and blend it into the existing landscape. Native plants will be used where possible. The work will be completed as quickly as possible after construction to lessen the amount of time the highway grade will be more visible.</p> <p>Landscaping and a trail system are planned for the entire length of Legacy Parkway. Landscaping includes different approaches for different areas. Where Legacy Parkway is adjacent to I-15, grasses will be used. In areas of open farmland and light industry, there will be moderate tree and shrub planting. Windows facing east will maintain views of the mountains and windows facing west will maintain open views. In residential areas, berms and tree and shrub plantings will be used.</p>
<b>Energy</b>	None.
<b>Construction</b>	<p>A public information program will be implemented to alert the community of ongoing and future construction activities. Information will include construction work hours and alternative travel routes. Signs will be used to notify motorists of work activities and changes in traffic patterns. Night and weekend work may shorten the duration of the construction impacts. Lights used during nighttime construction will be aimed directly at the work area and/or shielded from nearby residences. Construction activities will be limited during certain periods to protect threatened and endangered species.</p>
<b>Best Management Practices</b>	<p>The following construction BMPs will be implemented during construction.</p> <ul style="list-style-type: none"> <li>• Silt fence.</li> <li>• Berms.</li> <li>• Check dams.</li> </ul>

The silt fence will be placed to filter out silt/sediment prior to the stormwater runoff leaving the right-of-way. The contractor will be required to place earthen berms inside the silt fence along both sides of the right-of-way and to place check dams at each drainage crossing. These BMPs will prevent silt and sediment from leaving the right-of-way.

Impact Category	Mitigation Measures
<i>Construction Noise</i>	<p>To reduce temporary noise from construction, contractors will comply with all state and local regulations relating to construction noise. In addition, the following measures will be implemented.</p> <ul style="list-style-type: none"> <li>• Construction will be restricted to daytime hours within 1,000 ft of residences. No construction will be performed within 1,000 ft of an occupied dwelling unit on Sundays or legal holidays or between 10:00 p.m. and 6:00 a.m. on other days. Any variance from this condition will require approval by the UDOT construction manager.</li> <li>• All equipment will have sound control devices at least as effective as the original factory-installed devices. No equipment will have unmuffled exhaust.</li> <li>• The noise from any rock-crushing or screening operations conducted within 3,000 ft of any occupied dwelling unit will be mitigated either by placing material stockpiles between the operation and the affected dwelling or by other means approved by the UDOT construction manager.</li> <li>• As directed by the UDOT construction manager, the contractor will implement appropriate additional noise mitigation measures, possibly including changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.</li> </ul>
<i>Construction Haul Routes</i>	UDOT will specify that the contractor only use state roads as haul routes. Haul routes will vary depending on where construction is taking place along the roadway.
<i>Construction Air Quality</i>	Fugitive dust, which is dust generated by construction equipment such as haul trucks and earth-moving vehicles, will be mitigated according to a dust control plan, to be developed by the contractor according to Utah Division of Air Quality standards. This plan will include measures for minimizing fugitive dust, such as applying dust suppressants and water sprays, minimizing the extent of disturbed surface areas, and restricting activities during periods of high wind.
<i>Construction Vibration on Clark Lane Historic District</i>	This mitigation includes maximum energy ratings for pile driving hammers, prescribed vibration monitoring requirements for the home at 399 W. State Street, specific guidance on measures to take if vibration levels exceed 0.3 cm/sec (0.12 in/sec), a requirement for pre- and post-construction surveys of structures in the CLHD, and notification of homeowners in the district prior to pile driving activities.
<i>Construction Streetscape Impacts</i>	None of the build alternatives will affect mature trees in front of 393 W. State Street and 398 W. State Street in the CLHD. To ensure that the CLHD and its contributory elements are returned to their original pre-construction condition, the September 2005 MOA stipulates that the design of the State Street overpass will include provisions for minimizing grade changes, redesigning and incorporating sidewalks within the CLHD into the sidewalks for the new bridge structure, and maintaining existing landscape and streetscape features.
<b>Short-Term Uses vs. Long-Term Productivity</b>	None.

Impact Category	Mitigation Measures
<b>Irreversible and Irretrievable Commitment of Resources</b>	None.
<b>Section 4(f) Properties</b>	
<i>Farmington Bay Waterfowl Management Area (FBWMA)</i>	<u>Avoidance</u> The Selected Alternative will avoid direct use of the FBWMA eastern entrance and the new parcel of land that has become part of the FBWMA since publication of the June 2000 Final EIS.
	<u>Minimization Measures</u> 128 ha (317 ac) of land included the Legacy Nature Preserve will serve to buffer the FBWMA from future development.
<i>Bountiful City Pond</i>	<u>Avoidance</u> The Selected Alternative will not result in direct use of this resource due to modifications made to the final design and reevaluation of specific areas of the property eligible for protection under Section 4(f). Modifications to the final design included constructing retaining walls to avoid any fill in the pond and associated wetlands. In addition the City of Bountiful, in coordination with the Utah Division of Wildlife Resources and Sport Fish Restoration, has developed and implemented a management plan that includes developing specific areas of the property for recreation purposes and other areas for municipal purposes. Improvements have been made to the recreation facilities near the pond, and recreation use has increased. The areas of the property used for and functioning as recreation resources are eligible for protection under Section 4(f). Those areas of the property not used for recreation have been reevaluated, and such municipal uses are not eligible for protection under Section 4(f). Specifically, areas developed and managed as public recreation areas on the property will not be affected by the proposed action. The City of Bountiful has agreed to accept 4 ha (10 ac) of replacement land in exchange for less than 2.4 ha (5.9 ac) of land needed for the Selected Alternative.
	<u>Minimization Measures</u> The Selected Alternative right-of-way will be the minimum possible that meets design standards. The land used will be replaced with land of at least equal value and usefulness.
<i>Utah State Parks Land and Jordan River Raceway (renamed Jordan River OHV Center)</i>	<u>Avoidance Alternatives</u> The Selected Alternative will require 1.0 ha (2.5 ac) of the Jordan River OHV Center. To avoid using Jordan River OHV Center land, the interchange will have to be designed to stay within the current right-of-way, which could not be done without violating the desirable standards of geometric design.
	<u>Measures to Minimize Harm</u> The Selected Alternative will use the minimum right-of-way needed to meet roadway design standards and will least harm this resource. The land used will be replaced with land of at least equal value, location, and usefulness.

Impact Category	Mitigation Measures
<i>Historic Resources</i>	<u>Avoidance Alternatives</u>
	<p><i>White House at 10 North 650 West, Farmington:</i> The Selected Alternative will require a direct use of the White House at 10 North 650 West in Farmington, including demolition of the structure and incorporation of the property into the project right-of-way. After publication of the Final EIS in June 2000, the ILS form was completed in accordance with U.S. Secretary of Interior's Standards and Guidelines for documentation (48 FR 44728-37). The site documentation was submitted to SHPO on February 21, 2001. SHPO approved the site documentation on March 8, 2001. The structure was subsequently demolished.</p>
	<p><i>Clark Lane Historic District, Farmington:</i> The Selected Alternative will not require a permanent use of the CLHD or structures therein because design and minimization measures have been developed and included in the September 2005 MOA to avoid a permanent direct use of the CLHD and result in a temporary occupancy instead. The temporary occupancy of the CLHD will meet all the criteria outlined in 23 CFR §771.135(p)(7).</p>
	<p><i>662 West Clark Lane, Farmington:</i> The Selected Alternative will avoid demolishing the historic structure by construction of retaining walls. The direct use required of 0.02 ha (0.06 ac) from the historic property boundary could not be avoided because of the right-of-way required for the northern interchange with I-15 and US-89, a system-to-system connection between Legacy Parkway, I-15, and US-89. Avoiding the direct use of this property would require relocating the entire northern interchange, which is not prudent.</p>
	<p><i>D&amp;RG Railroad:</i> The mainline of the Selected Alternative will require a direct use of the D&amp;RG Railroad by crossing it at grade at one location. Based on design refinements and considerations, UDOT has proposed spanning the D&amp;RG Railroad with an arch structure at the crossing just south of Parrish Lane. The access road crossing will remain at grade. This design modification will reduce direct use of the D&amp;RG by 0.3 ha (0.7 ac). The design modification will occur within the right-of-way analyzed in the Final Supplemental EIS. SHPO has concurred there will be no adverse effect as a result of the direct use of the D&amp;RG Railroad.</p>
	<u>Measures to Minimize Harm</u>
	<p><i>662 West Clark Lane, Farmington:</i> Construction of a retaining wall will minimize the impact on 662 West Clark Lane in Farmington and will allow the structure to remain in place, but the Selected Alternative will still require a direct use of 0.02 ha (0.06 ac) from the historic property boundary. Other minimization measures include completion of an ILS form in accordance with the U.S. Secretary of Interior's <i>Standards and Guidelines</i> for documentation (48 FR §44728-37). All actions will be coordinated with SHPO and ACHP in accordance with the September 2005 MOA.</p>
	<p><i>D&amp;RG Railroad:</i> SHPO concurred there will be no adverse effect on the D&amp;RG Railroad by crossing it at grade. All possible planning to minimize harm to the resource will be included in implementation of the Selected Alternative.</p>

Impact Category	Mitigation Measures
<i>Archaeological Sites</i>	<u>Avoidance</u>
	The Selected Alternative will require a direct use of Sites 42Dv2 and 42Dv94 by incorporation of the site into the right-of-way required for southern interchange with I-215. These two sites are located between the proposed interchange and the proposed trail. Because of the existing facilities associated with I-215 and to maintain connectivity of the proposed trail with the existing trail system, the properties containing Sites 42Dv2 and 42Dv94 must be acquired for use as right-of-way. No further work will take place within the boundaries of the site.
	<u>Minimization Measures</u>
	No further use of or impacts on Sites 42Dv2 and 42Dv94 are anticipated during this project. Any possible impacts could be minimized through the completion of archaeological data recovery in those portions of the sites directly used upon discovery and as outlined in the September 2005 MOA. Archaeological data recovery will be completed in accordance with the U.S. Secretary of the Interior's <i>Standards and Guidelines for Archaeology and Historic Preservation</i> (48 FR §44716). Additional minimization measures for these sites include delineation of the site boundaries and fencing during construction. SHPO and consulting parties will also be given the opportunity to review construction plans.
<b>Section 6(f) Properties</b>	
<i>Jordan River OHV Center</i>	Replacement land (6.6 ha [16.2 ac]) of equal value, location, and usefulness will be provided in accordance with Section 6(f) requirements to replace the portion of the Jordan River OHV that will be required.
Notes:	SHPO = (Utah) State Historic Preservation Office TSS = total suspended solids UDEQ = Utah Department of Environmental Quality UDOT = Utah Department of Transportation UDWR = Utah Division of Wildlife Resources UPDES = Utah Pollutant Discharge Elimination System URAA = Uniform Relocation Assistance Act USFWS = U.S. Fish and Wildlife Service
ACHP = Advisory Council on Historic Preservation	
BMPs = best management practices	
Corps = U.S. Army Corps of Engineers	
EPA = U.S. Environmental Protection Agency	
FBWMA = Farmington Bay Waterfowl Management Area	
ILS = Intensive-Level Survey	
MBTA = Migratory Bird Treaty Act	
MOA = Memorandum of Agreement	
OSHA = Occupational Safety and Health Administration	
PA = Preferred Alternative	

## I. MITIGATION MEASURES ADOPTED

As summarized above, the Final Supplemental EIS identifies a number of mitigation measures that would reduce or eliminate the environmental effects of the Selected Alternative. The federal lead agencies will adopt all the mitigation measures described in the Final Supplemental EIS for the Selected Alternative as a commitment of this Record of Decision. A discussion of the monitoring and enforcement program specific to these measures is provided below in Section J, *Monitoring and Enforcement Program*.

## J. MONITORING AND ENFORCEMENT PROGRAM

Monitoring and enforcement of the above-described measures to minimize harm is a commitment of this Record of Decision. The Corps will also provide for monitoring as part of its Clean Water Act Section 404 permit decision. The major responsibilities under these procedures are summarized below.

Many of the mitigation measures listed above will be incorporated into the contract, plans, and specifications for construction and operation of the Selected Alternative and will be monitored in accordance with construction/postconstruction monitoring plans. Enforcement of the contract provisions and monitoring of the proposed action is the responsibility of UDOT. UDOT will be responsible for ensuring that the measures to minimize harm are incorporated into the plans and right-of-way acquisition activities.

As described in Chapter 4 and Appendix F of the Final Supplemental EIS, and as summarized above, UDOT will preserve 849 ha (2,098 ac) of land (i.e., the Legacy Nature Preserve) west of the Selected Alternative alignment to mitigate direct and indirect impacts on wetland and wildlife habitats as a result of the proposed action. UDOT began purchasing properties designated for the Preserve in 2001, and has recorded Covenant and Use Restriction with a Recorder of Deeds for 90 percent of the mitigation lands within the Preserve. UDOT has committed to the Corps that it will obtain the entire mitigation area in fee title and will deed restrict these properties to protect mitigation lands in perpetuity. If UDOT determines that acquisition of any particular parcel is unfeasible, UDOT could purchase alternative mitigation property subject to Corps approval. All water rights appurtenant to these properties will also be acquired.

Mitigation, monitoring, and reporting activities for the Preserve began in 2001, in accordance with the January 2001 Clean Water Act Section 404 permit and the addendum to the Final EIS Mitigation Plan, which was approved by the Corps in April 2001. Revisions to the terms of management of the Preserve will be developed with the Corps during its review of UDOT's revised Clean Water Act Section 404 permit application requesting authorization to construct the Selected Alternative.

With Corps oversight, the Preserve will be managed by UDOT for a 5-year period, or until the success criteria in the final mitigation plan for the Preserve have been met. After it has been determined that the Preserve is fully functional and has met the required mitigation obligation, UDOT will make a decision to either retain management of the Preserve or seek to transfer the Preserve to an acceptable third party or parties. The terms for the long-term management of the property will be developed in conjunction with the Corps.

UDOT will also provide appropriate funding for long-term management of the property, pursuant to requirements of the approved long-term mitigation management plan. FHWA expects that the terms for long-term management of the Preserve and other mitigation conditions will be enforceable conditions of the Section 404 permit, when and if issued by the Corps.



## K. COMMENTS ON THE FINAL SUPPLEMENTAL EIS

Notice of the Final Supplemental EIS was published in the Federal Register on November 10, 2005. The lead agencies provided a 32-day public comment period that ended on December 12, 2005. The Final Supplemental EIS was distributed to federal, state, regional, and local agencies, as well as some members of the public. In addition, copies were available to the general public at local libraries, and the document was available online at the Corps and UDOT's websites. The lead agencies received 76 comments during the public review period for the Final Supplemental EIS. The administrative record includes all of the comments received on the project.

One federal agency comment was received on the Final Supplemental EIS. In a letter dated December 12, 2005, EPA acknowledged receipt of the Final Supplemental EIS and stated that it understood that the least environmentally damaging practicable alternative (LEDPA) would be identified in the Clean Water Act 404(b)(1) compliance documentation included the Corps' ROD for the project. EPA agreed that appropriate practicability considerations, including logistics, were made in the evaluation of the D&RG Corridor for the project. In addition, EPA recommended that details of the November 14, 2005 Settlement Agreement be included in the ROD. The Corps forwarded the Clean Water Act 404(b)(1) compliance documentation to EPA on December 14, 2005. Details of the Settlement Agreement are included in Section E, *State of Utah Settlement Agreement*, of this ROD.

The Department of Interior (DOI) and the Utah Field Office of the U.S. Fish and Wildlife Service were contacted by phone on January 5, 2006, to verify that they had no comments on the Final Supplemental EIS.

The vast majority of the public comments received pertained to noise issues in the areas of the Charnell and Birnam Woods subdivisions in West Bountiful. That issue is addressed below. In addition, two clarifications are noted below. Other than the noise issues, the remaining 12 comments were general and primarily included requests, which have been addressed, for documents and/or maps.

### Comments and Responses

#### *Comment:*

Approximately 62 commenters mentioned noise-related issues pertaining to the neighborhoods of Charnell and Birnam Woods in West Bountiful.

#### *General Response:*

The lead agencies conducted a thorough noise analysis to determine impacts of the proposed Legacy Parkway on receptors near the alignment. The Charnell and Birnam Woods subdivisions in West Bountiful were considered in the noise analysis, and noise impacts in those areas have been estimated and considered in the preparation of the Final Supplemental EIS. The following related comments are responded to individually below.

Comment A) Commenters stated that noise receptors used in the noise analysis were located farther from the proposed alignment than the Charnell subdivision and that therefore additional studies were necessary to determine noise impacts in the Charnell area.

Response A) To determine existing noise conditions for a noise analysis, locations for noise monitors are selected to be representative of land uses in an area. Noise monitors ML-9 and ML-10 (see Figure 4.9-3 of the Final Supplemental EIS) were selected to represent noise conditions for the Charnell and Birnam Woods subdivisions. Although the noise monitoring sites were not located specifically within the subdivisions, the proximity of the monitoring location to the subdivisions means that noise levels recorded at those locations are representative of

noise levels that would likely be experienced in the subdivisions themselves. To determine project-related noise levels, the roadway network was modeled, the location of individual residences within the development were coded into the computer model, and noise levels were estimated at those receptor locations. Based on this information, estimated noise levels at Charnell would be between 66 to 69 decibels (dBA), and estimated noise levels at Birnam Woods would be between 68 to 73 dBA.

Comment B) Commenters expressed concern about the criteria used to determine whether noise abatement should be considered.

Response B) UDOT has established a Noise Abatement Policy (UDOT 08A2-1) that details highway traffic noise prediction requirements, noise analysis procedures, and noise abatement criteria (NAC) consistent with the requirements of 23 CFR §772. According to this policy, a traffic noise impact occurs when the design noise level approaches (is within 2 dBA of) or exceeds the NAC, or when the design noise level exceeds the existing noise level by 10 dBA or more. This information has not changed since publication of the Final EIS. It should be noted that in 2004, UDOT published an updated Noise Abatement Policy. The NAC for the 2004 Noise Policy did not change from the April 2000 Policy. Because the noise analysis conducted for this Supplemental EIS was initiated prior to the date of publication of the revised 2004 policy, the policy that was in effect in April 2000 was used to analyze abatement for traffic-related noise impacts, although it should be noted that the use of the 2004 policy would not change the results of the noise analysis or decision regarding abatement measures.

The UDOT noise abatement criteria for residential areas is 65 dBA (UDOT 08A2-1, April 2000). Based on the noise analysis performed for the Final Supplemental EIS, noise levels for both Charnell and Birnam Woods are expected to exceed 65 dBA. In accordance the UDOT Noise Abatement Policy, noise abatement in the form of a noise wall was considered for the Charnell subdivision. Noise modeling was conducted for the area. Noise model results showed that even a 30-foot high sound wall would not reduce noise levels by at least 5 dBA (the minimum noise reduction required by the UDOT Noise Abatement Policy). Therefore, a sound barrier was not proposed for the Charnell subdivision. According to UDOT's Noise Abatement Policy, a development is not be eligible for noise abatement measures if the development was platted after the ROD for a project was issued. Because the Birnam Woods subdivision was platted after the location of Legacy Parkway was approved in FHWA's 2000 Record of Decision for the Final EIS, a sound wall was not proposed for the Birnam Woods subdivision, in accordance with the UDOT Noise Abatement Policy.

Comment C) Commenters requested that a berm be included in the Charnell/Birnam Woods area and that it be 9-ft high in that area to help buffer noise and address safety issues.

Response C) As stated in the Final Supplemental EIS, the berm proposed as part of the Legacy Parkway project extends along the eastern side of the alignment between 500 South and Porter Lane in West Bountiful, and along the western side between Glovers Lane and State Street in Farmington (see Figure 2.1-3 of the Final Supplemental EIS). The Charnell/Birnam Woods area is north of Porter Lane and outside the area where the berm is proposed.

Throughout the preparation of the EIS and the Supplemental EIS, UDOT coordinated with each of the cities and the two counties affected by the Legacy Parkway. Numerous meetings were held with the cities and counties beginning in the summer of 1997 and

continuing throughout the development and publication of the Final Supplemental EIS in November 2005. In these meetings, the Cities of West Bountiful and Farmington City requested an earthen berm be included in the project at the locations described in Section 2.1.2.3 of the Supplemental Final EIS to provide visual buffering. Farmington City requested a berm along the western side of the alignment between Glovers Lane and State Street to buffer future development. West Bountiful requested a berm along the eastern side of the alignment between the end of the on-ramp to Legacy from 500 South to Porter Lane. North of Porter Lane, the project will include an 84-ft wide landscaped buffer area and multi-use trail without the earthen berm. The landscaped buffer area provides a safe width between the parkway and Legacy Parkway Trail as well as visual buffer for developments adjacent to the project.

As described in Section 4.1.3 of the Final Supplemental EIS, the Selected Alternative is consistent with Mater Plans of West Bountiful and other cities in the project area. Section 4.7.2 of the Final Supplemental EIS describes the coordination and access of the Legacy Parkway Trail with the West Bountiful trail system. After the Final Supplemental EIS was published, additional coordination was conducted with the City of West Bountiful, in part because of the concerns raised by the residents of the Birnam Woods and Charnell subdivisions. The City of West Bountiful and UDOT have agreed to continue coordination during final project design and to consider other context-sensitive features to benefit the neighborhoods in West Bountiful. As described in the Final Supplemental EIS, a 9-ft high berm will not be constructed north of Porter Lane because the Birnam Woods development was platted after the location of Legacy Parkway was approved in FHWA's 2000 Record of Decision for the Final EIS.

## Clarifications

### *Policy Paper Clarification for FHWA ROD*

A point of clarification should be noted regarding the FHWA Section 4(f) Policy Paper referenced in Chapter 5, *Section 4(f) and 6(f) Evaluation*, of the Final Supplemental EIS. After circulation of the Final Supplemental EIS, it was noted that the document cites the 2005 version of the Policy Paper, but the language referenced is from the 1989 version. The intent of the 2005 Policy Paper is the same as that of the 1989 Policy Paper, but the 2005 version provides updated guidance on when and how to apply the provisions of Section 4(f) on FHWA projects that propose to use 4(f) land or resources.

This was an oversight. The language should have been updated from the 2004 Draft Supplemental EIS to reflect the 2005 Policy Paper. The lead agencies have determined that the language on page 5-11 of the Final Supplemental EIS should be corrected as follows. (Strikethrough indicates deleted text; underscore indicates new text.)

Section 4(f) applies to historic ~~sites~~ properties (those on or eligible for the National Register of Historic Places) located on these multiple-use land holdings and *only to those portions of the lands which are designated by statute or identified in the management plans of the administering agency as being primarily for park, recreation, or wildlife or waterfowl refuge purposes and* ~~which~~ are determined to be significant for such purposes.

For public land holdings which do not have management plans (or ~~where~~ existing management plans are out-of-date, ~~not current~~) Section 4(f) applies to those areas ~~which~~ that are publicly owned and function primarily for Section 4(f) purposes. *Section 4(f) does not apply to areas of multiple-use lands which function primarily for purposes other than park, recreation or refuges such as for those areas that are used for timber sales or mineral extraction in National Forests not protected by Section 4(f).* (Italics added for emphasis.)

*Figure 4.9-3 in Final Supplemental EIS*

Figure 4.9-3 in Section 4.9, *Noise*, of the Final Supplemental EIS incorrectly depicts the earthen berm continuing north of Porter Lane. As described on page 2.1-16 and shown on Figure 2.1-3 (*Berm Locations along the Proposed Right-of-Way*) of the Final Supplemental EIS, the berm is only proposed between 500 South and Porter Lane on the eastern side of Legacy Parkway and between Glovers Lane and State Street on the western side of the parkway.

*Limitation on Claims Notice (23 USC §13[1])*

FHWA and the Corps will publish a notice in the Federal Register, pursuant to 23 USC §139(I), indicating that one or more federal agencies has taken final action on permits, licenses, or approvals for this transportation project. After notice is published, claims seeking judicial review of those federal agency actions will be barred unless such claims are filed within 180 days after the date of publication of the notice, or within such shorter time period as is specified in the federal laws pursuant to which judicial review of the federal agency action is allowed.

## L. CONCLUSION

FHWA has determined that the Selected Alternative best meets the transportation needs of the North Corridor while maximizing environmental, safety, and socio-economic considerations. This decision is based on the Final Supplemental EIS and the entire project record.

As one part of the Shared Solution, Legacy Parkway will provide part of the transportation facilities needed in the North Corridor to accommodate the safe and efficient movement of people and goods through 2020. The updated transportation analysis presented in the Final Supplemental EIS, which utilized travel demand data from the 2004 WFRC travel demand model, is consistent with the Final EIS findings that Legacy Parkway, in combination with other components of the Shared Solution, is needed to relieve congestion on I-15 and achieve acceptable levels of traffic operating conditions throughout the North Corridor. The transportation analysis similarly reaffirms the need documented in the Final EIS to accommodate through-corridor traffic, promote local street traffic safety and emergency vehicle response times, and provide an alternate route during reconstruction of I-15 and emergency situations.

Based on a balanced consideration of the need for safe and efficient transportation; the social, economic, and environmental impacts of the Selected Alternative; and national, state, and local environmental goals, FHWA has determined that it is in the best overall public interest to construct the Legacy Parkway as part of the Shared Solution. The supplemental sequencing analyses completed in response to the court ruling reaffirm the conclusion in the Final EIS that it is not reasonable to delay construction of the Legacy Parkway or reconstruction of I-15 until maximum future transit is in place, nor is it reasonable to reconstruct I-15 prior to building the Legacy Parkway.

The Final Supplemental EIS demonstrates that the Selected Alternative provides additional traffic lanes in an alignment that balances and minimizes the environmental, economic, and social concerns associated with new highway construction. Adjustments to the right-of-way width resulting from the supplemental analysis completed in response to the court ruling have been made, and the decision from the Final EIS to not consider in detail an alignment in the D&RG regional corridor due to extraordinary community cohesion and displacement impacts has been confirmed.

FHWA has considered all the issues raised in the record and has consulted with other federal and state agencies, including the Corps, USFWS, EPA, FTA, UDNR, and UDEQ, as well as local jurisdictions in

January 8, 2006

the study area, in developing this project. The Selected Alternative was developed through a public process that included public outreach meetings, community planning and information committee meetings, and a comprehensive public comment and response process. Mitigation for unavoidable resource impacts will be incorporated into the project design, will be employed during construction, or will be implemented off site. The Legacy Nature Preserve will compensate for the loss of wetland and wildlife habitat and will provide permanent protection for Great Salt Lake wetland and wildlife ecosystems.

DATE: 1/10/06

BY: \_\_\_\_\_



Division Administrator  
Federal Highway Administration

